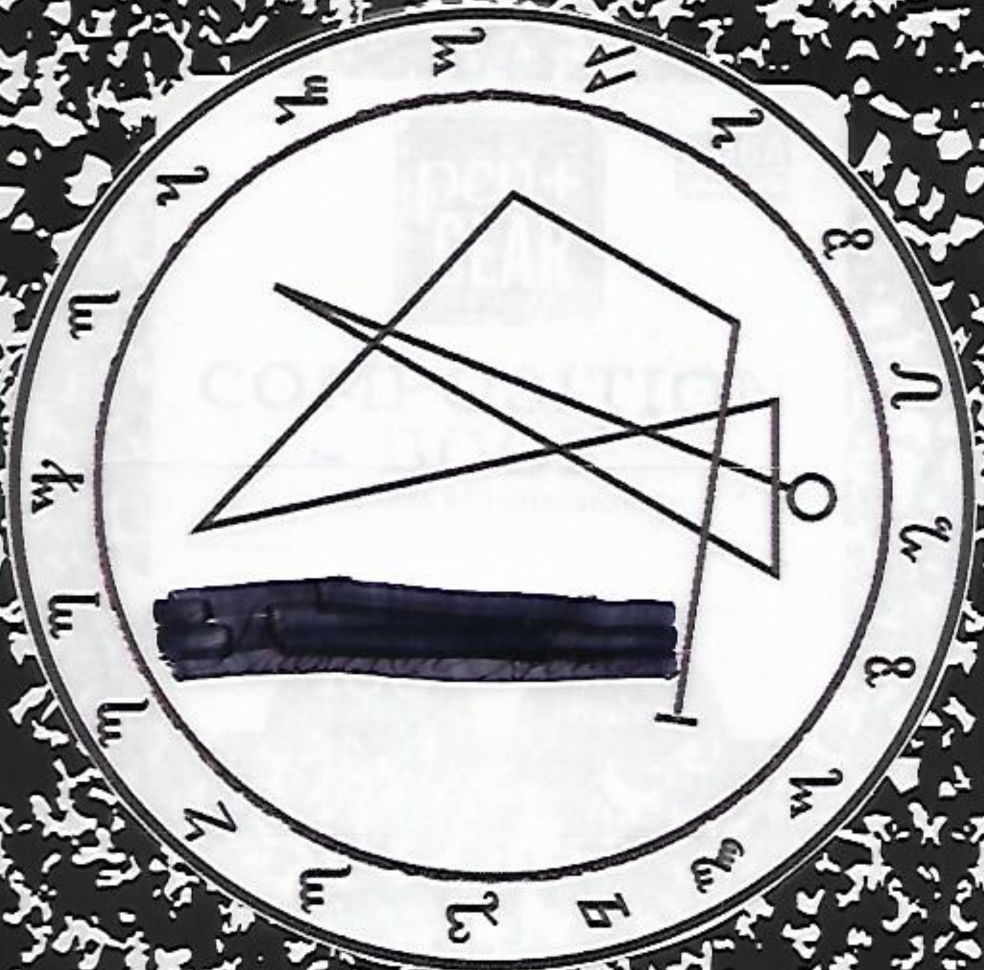

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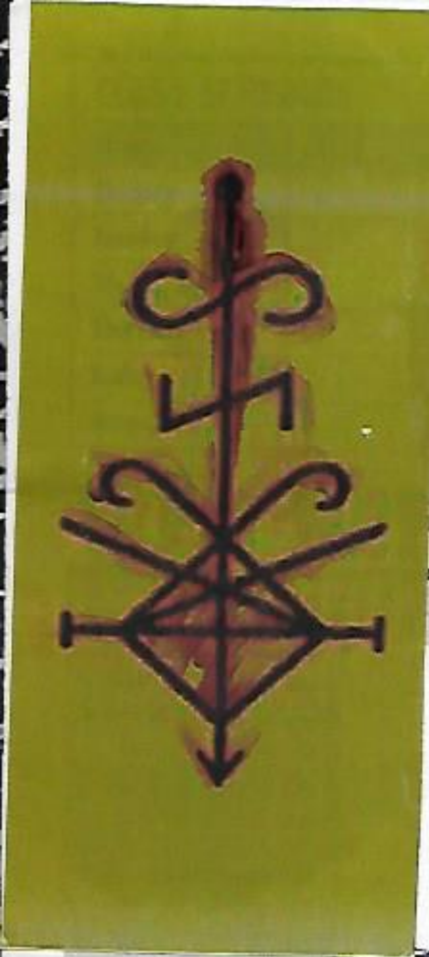

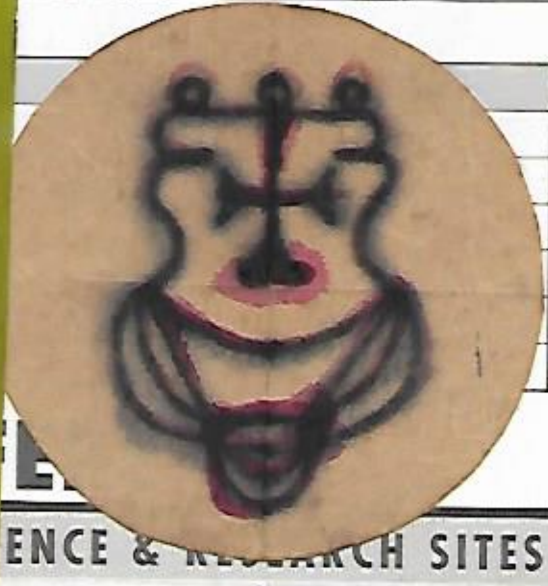

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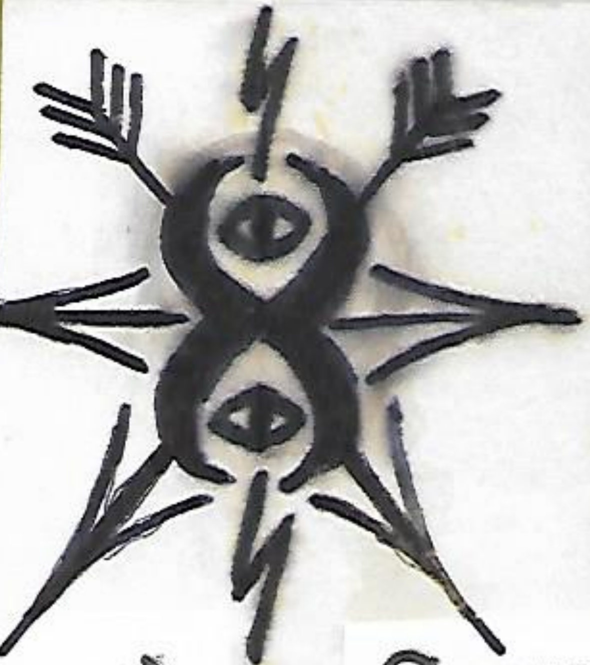

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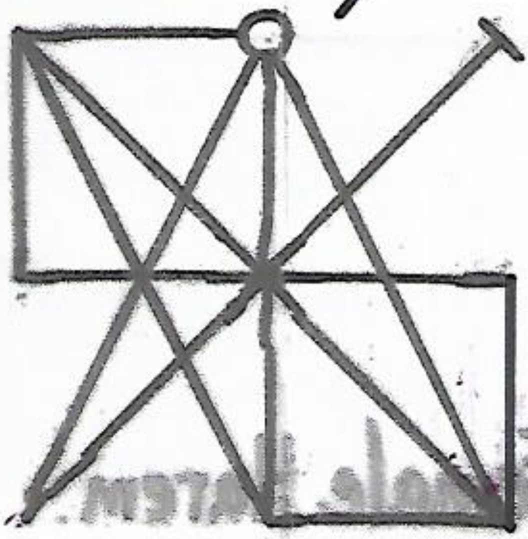

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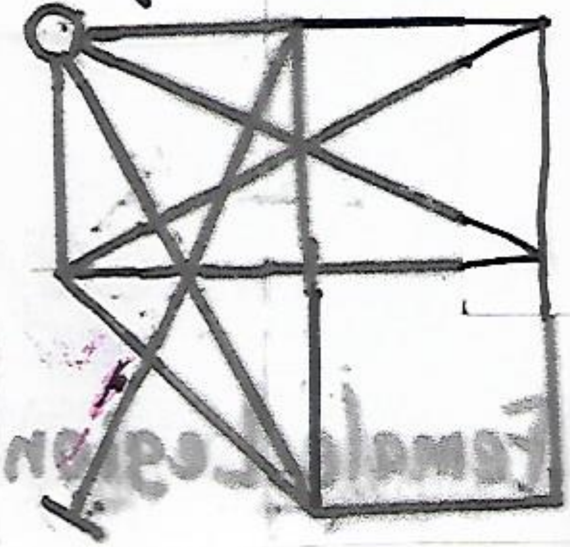
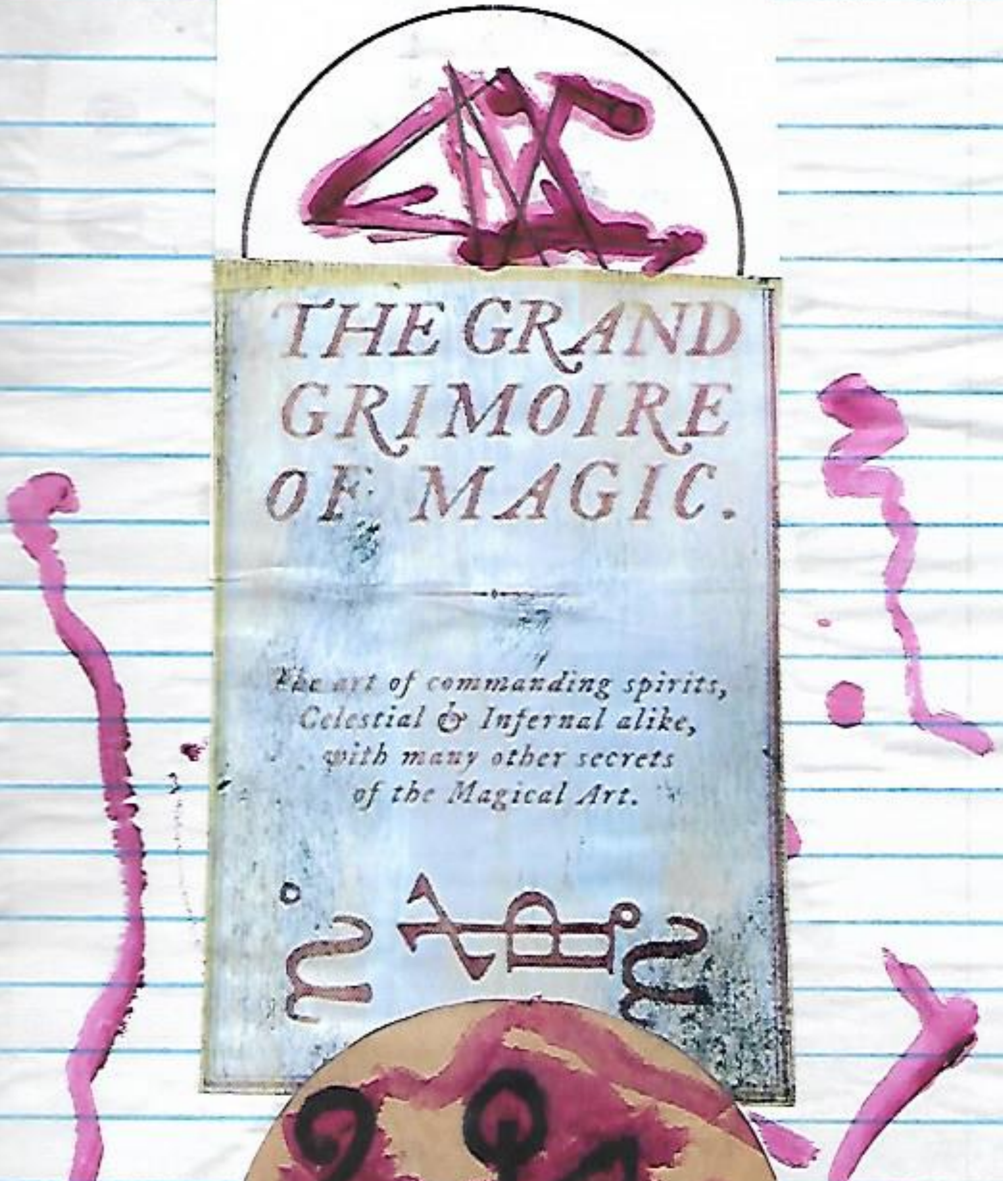
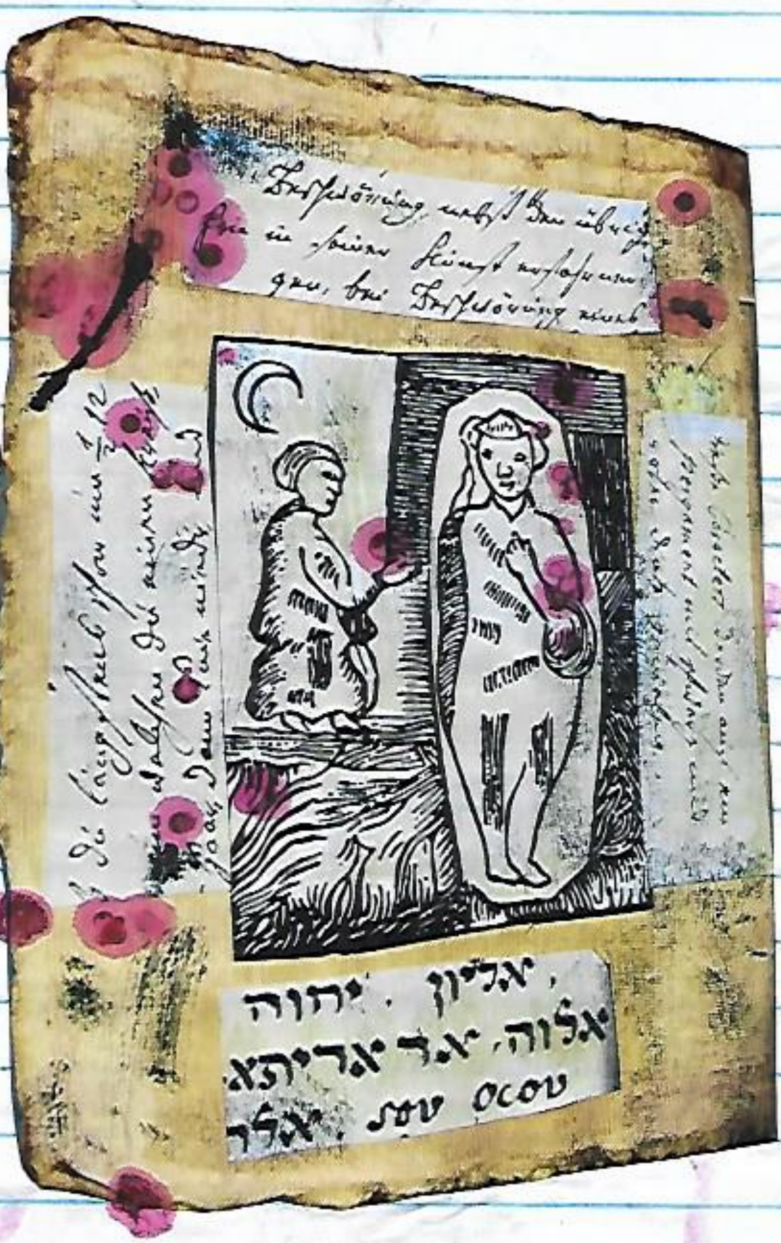




THE GRAND GRIMOIRE OF MAGIC.

The art of commanding spirits,
Celestial & Infernal alike,
with many other secrets
of the Magical Art.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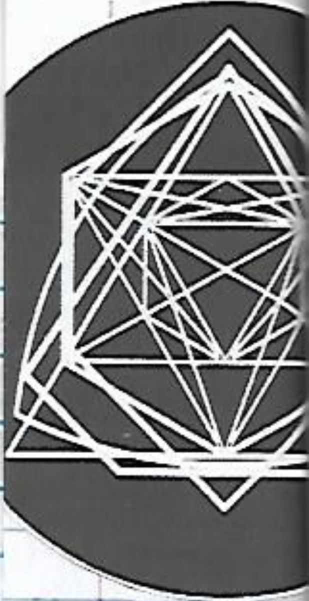
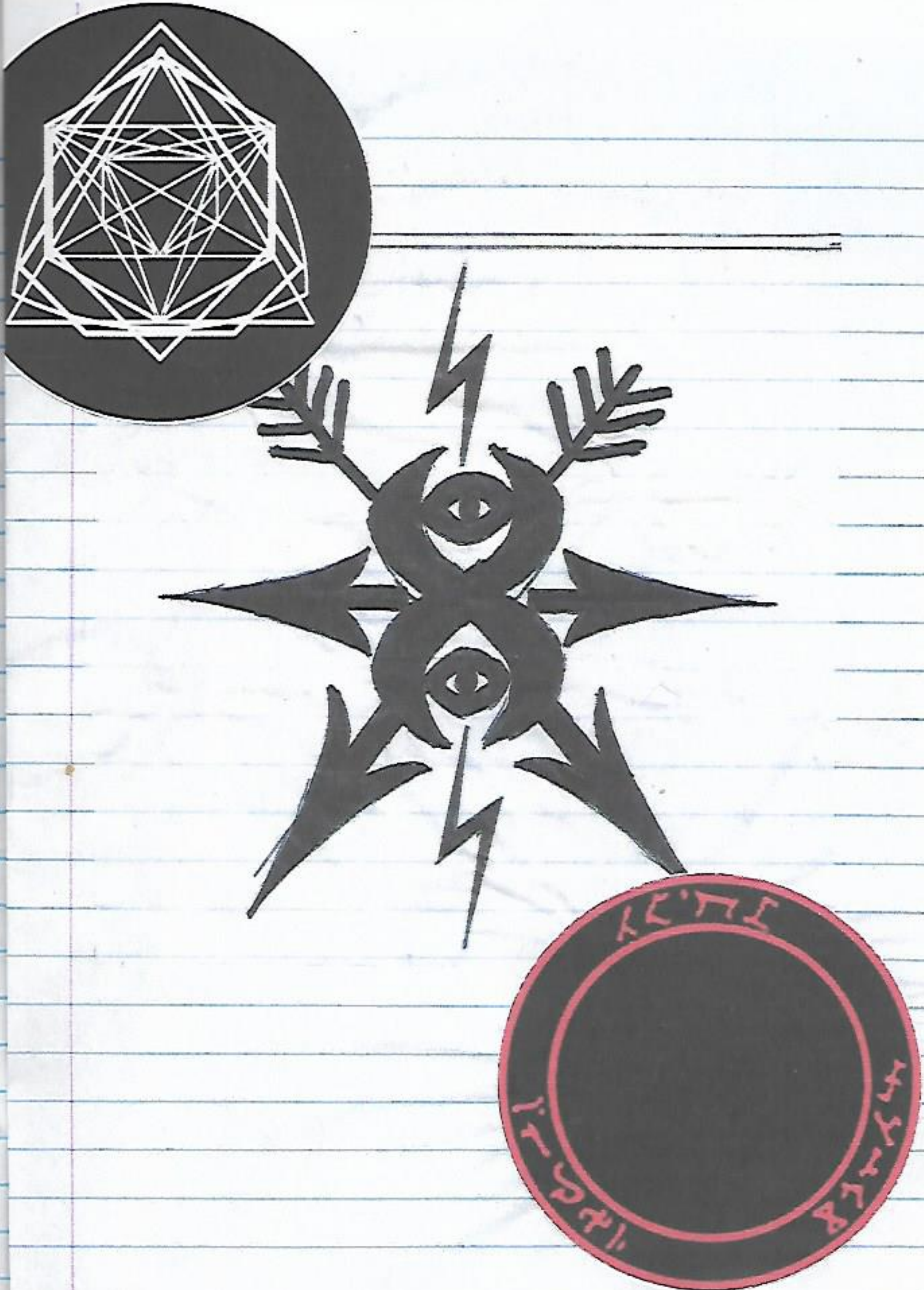


26/173
The Red Dragon



NAH-KAH EE-AH-OH-EH

In the name -EH
Elohim Daath
I call ese
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future es.

I con
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El Cha
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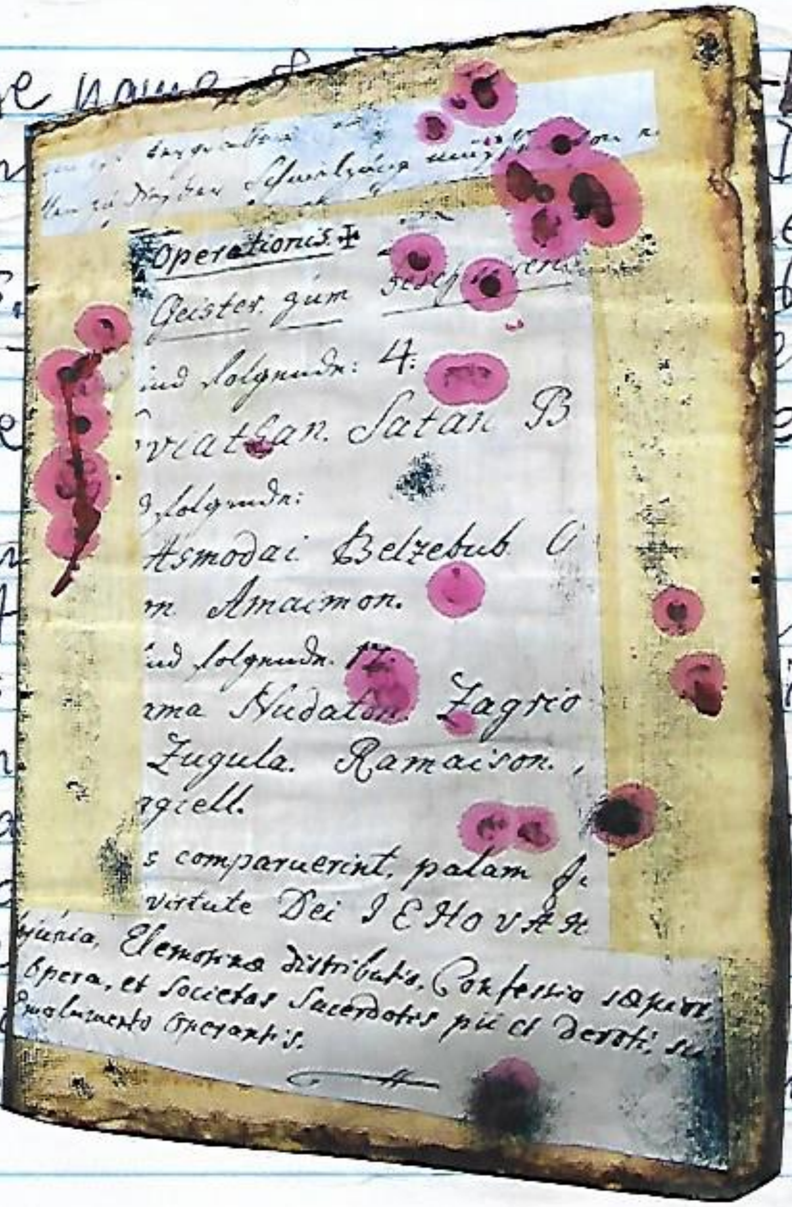

Operationis ✝
Geister gum
ind folgende: 4:
viathan. Satan B
, folgende:
Asmodai Belzebub O
m Amaimon.
ind folgende. 17
rma Hudaton Zagrio
Zugula. Ramaison.
agiell.
s comparuerint, palam
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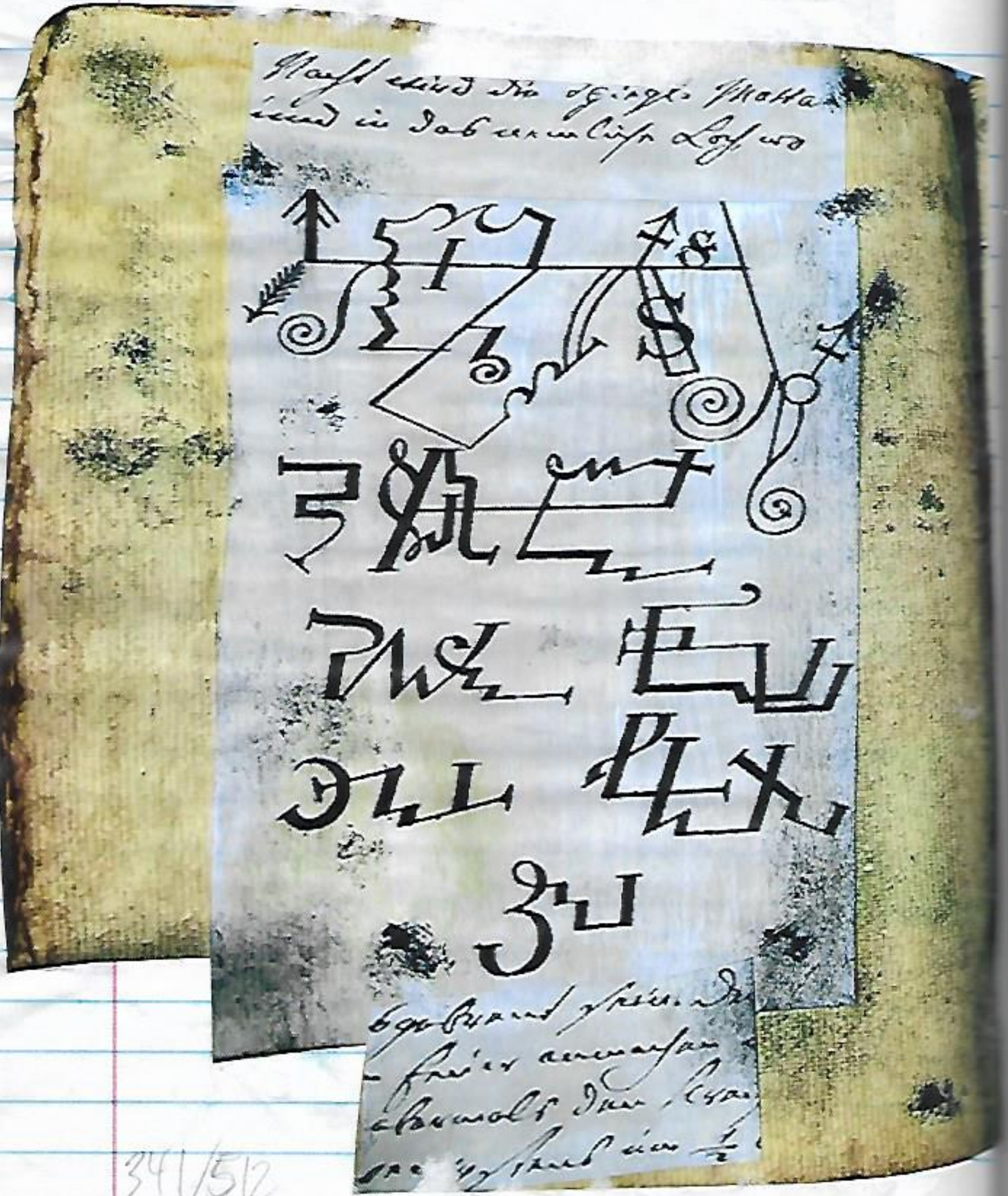
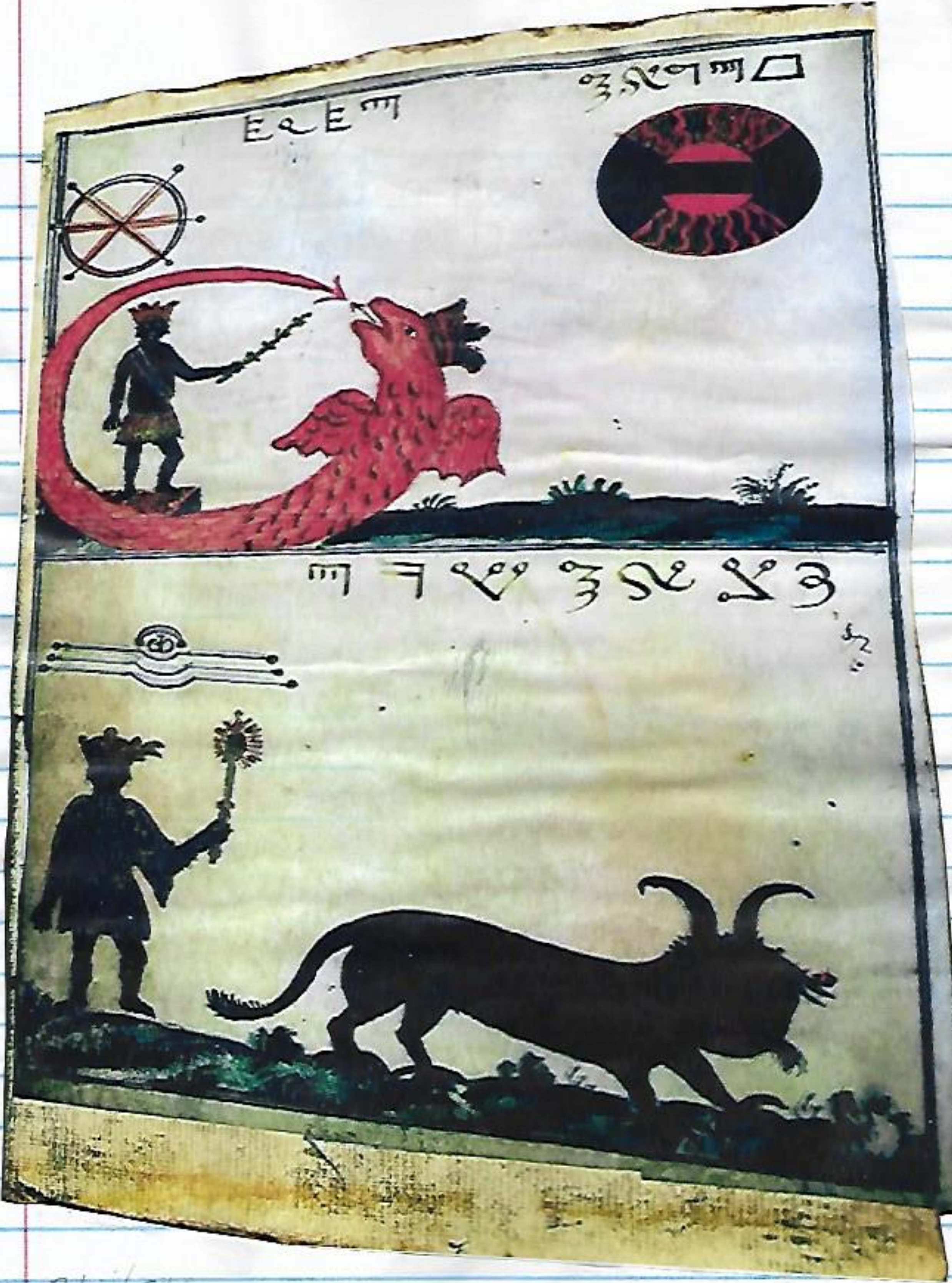
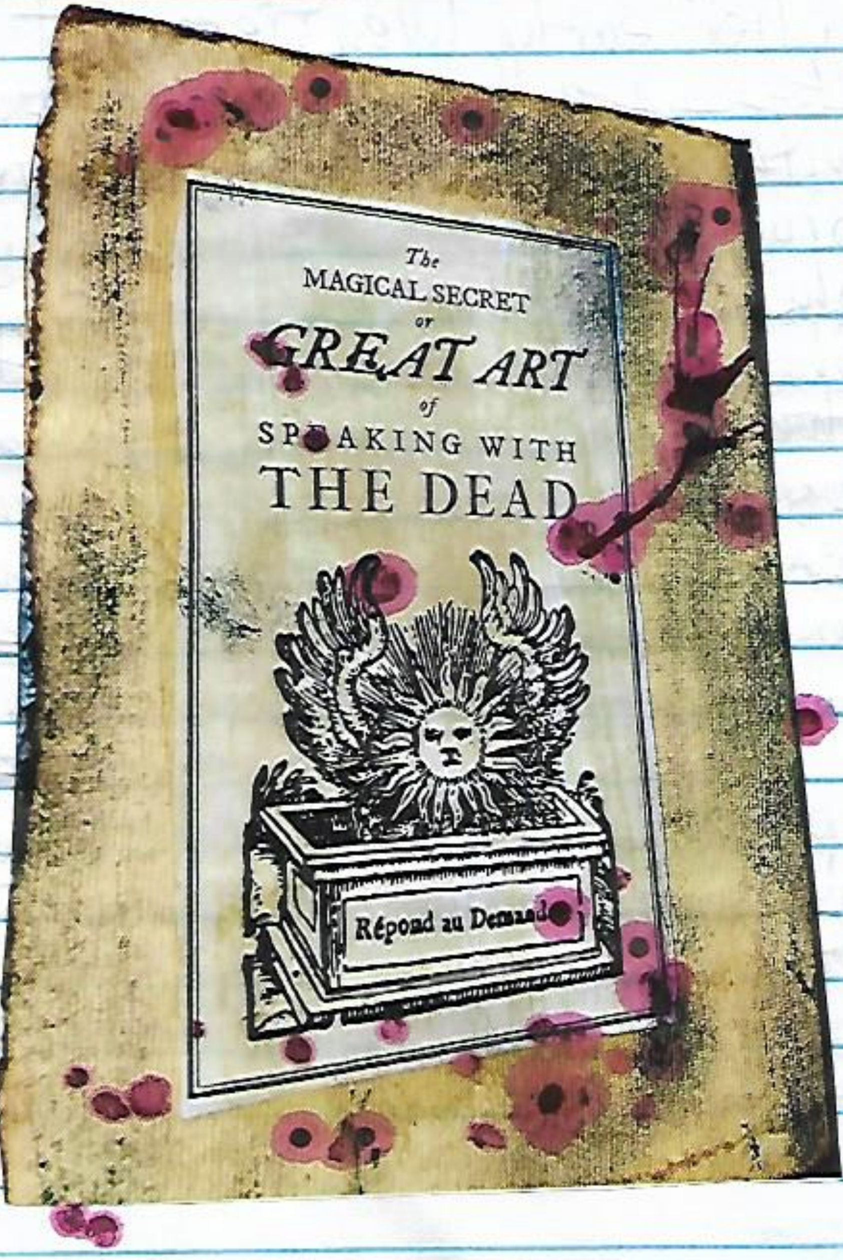
Opera, et Societas Sacerdotis pii et devoti
Emolumento Operantis.



341/512
J. Faust



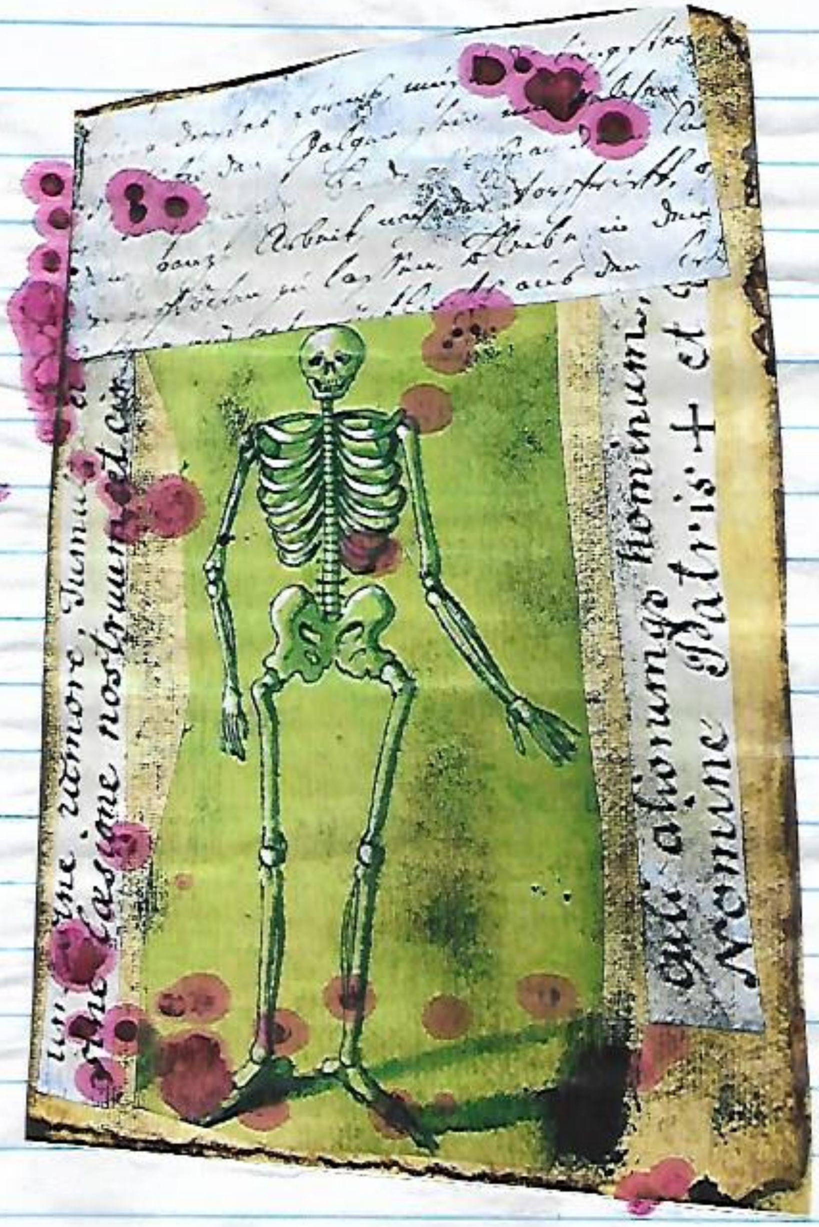
36/84
The Grimoire of St. Cyprian



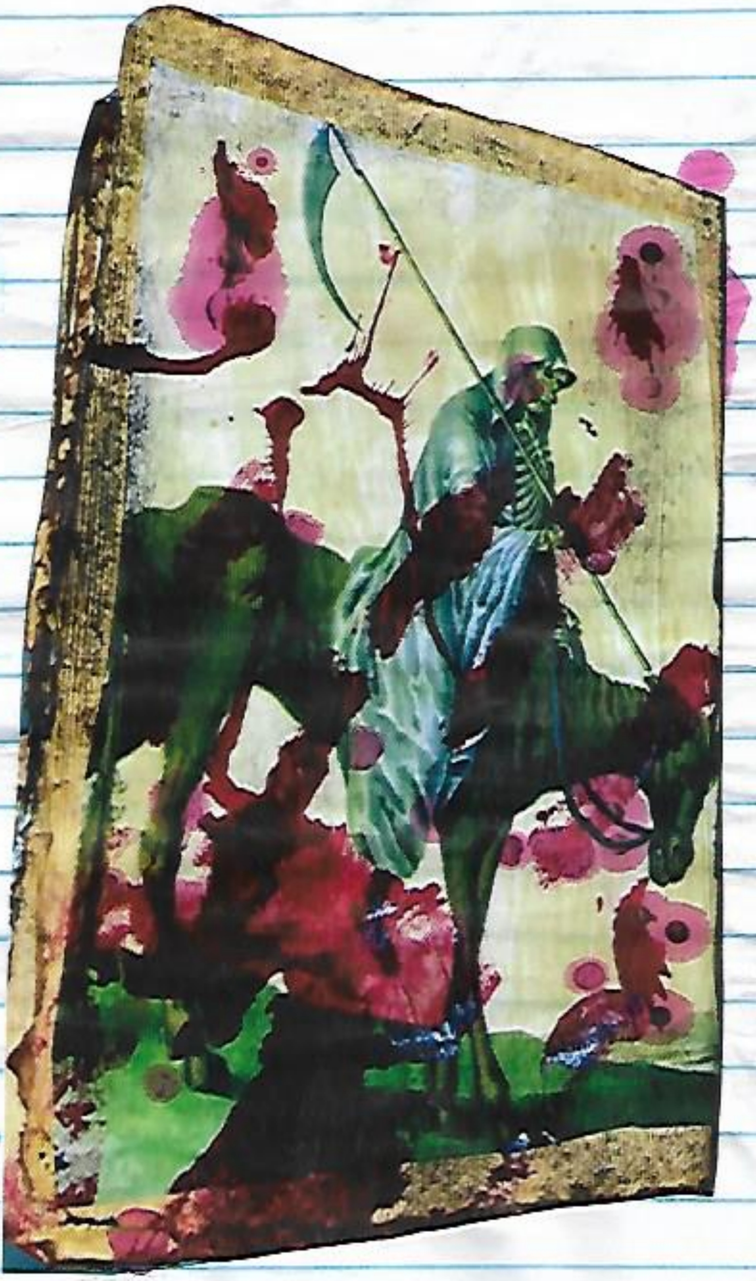
The
MAGICAL SECRET
or
GREAT ART
of
SPEAKING WITH
THE DEAD

Répond au Demande

88/1253
Grimorium Verum

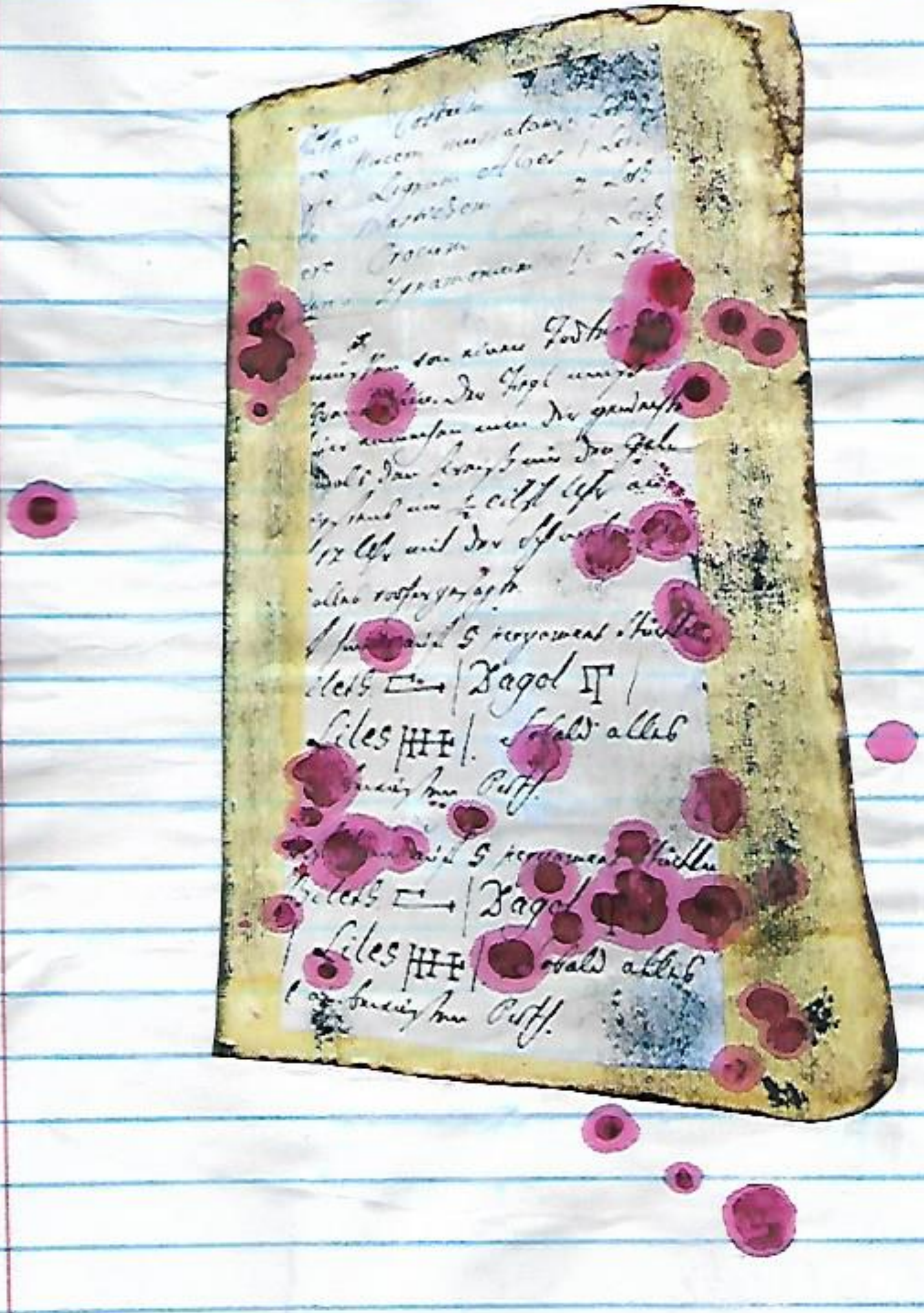

nomine Patris + et

8/113
Touch me not



46/113

Touch me



Nucem muscatam 1 Loth
Lignum aloes 1 Loth
[illegible] 1 Loth
Crocum 1 Loth
Cynamomum ½ Loth

[illegible]

5 pergament Stücklein
Beleth | Dagol |
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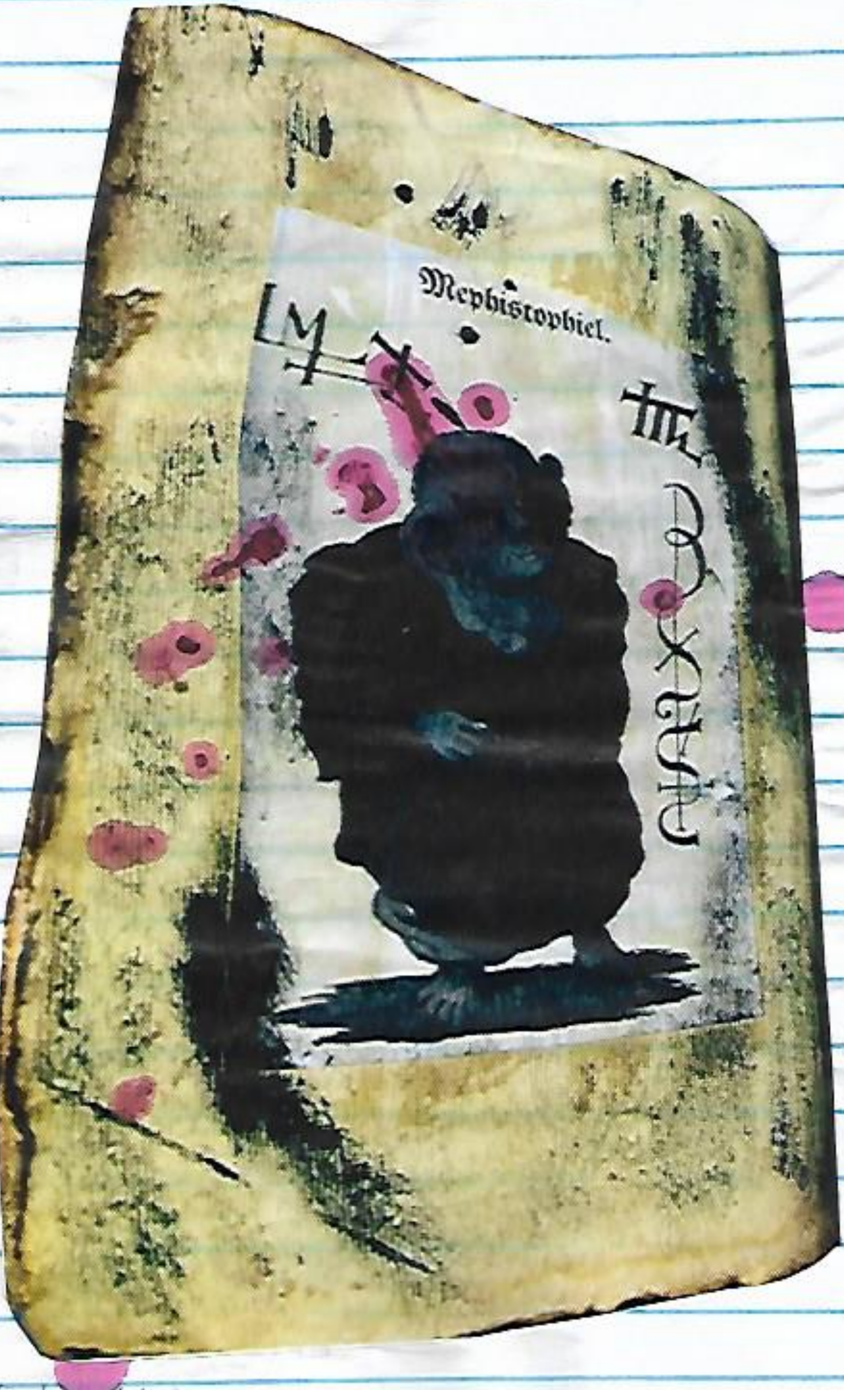
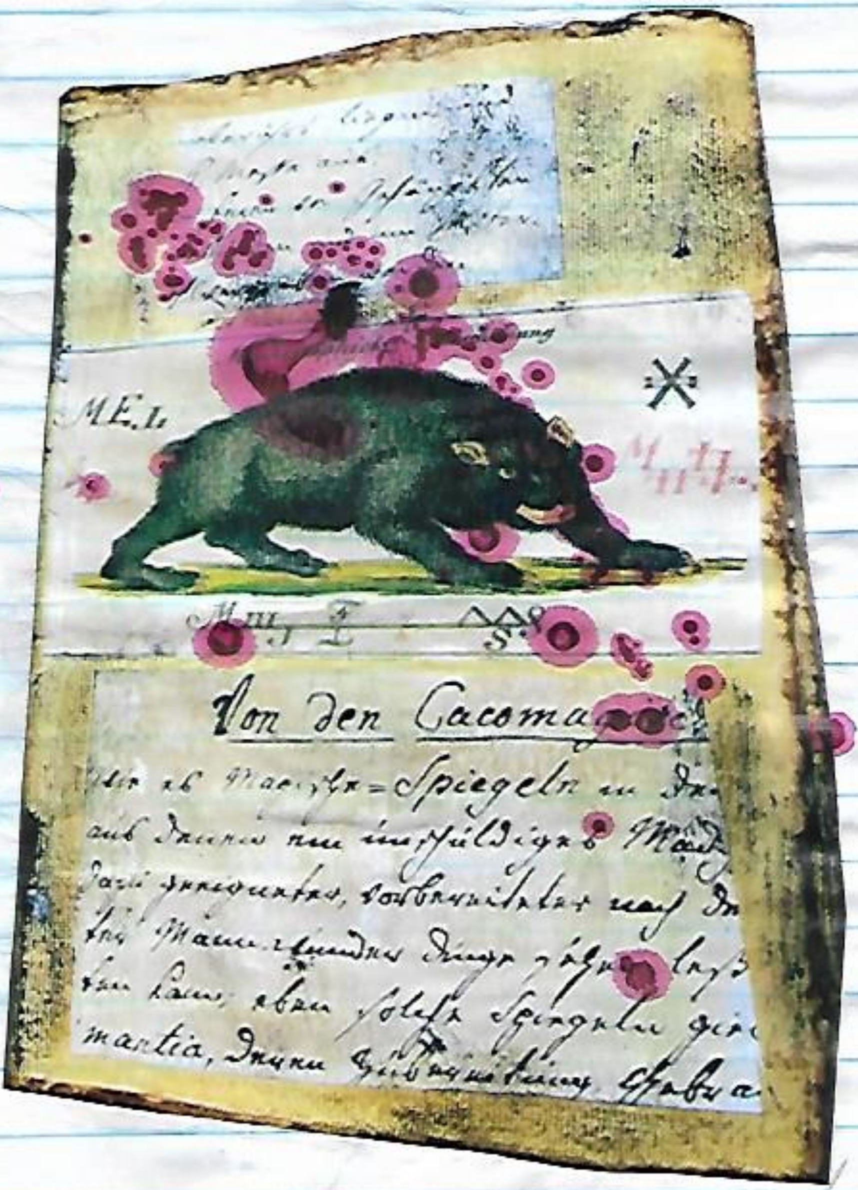

Mephistophiel.

pg 61/512
Dr. J. Faust

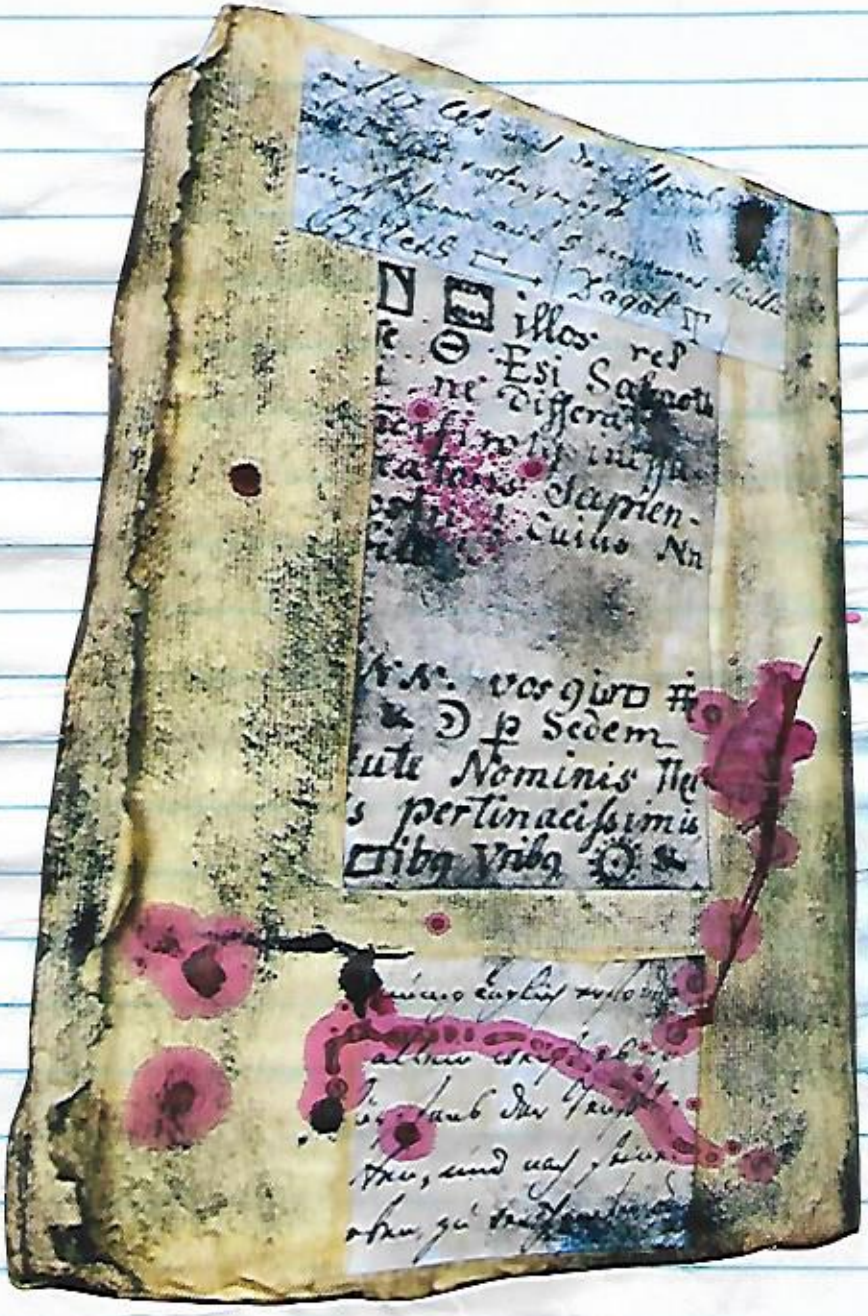


Von den Cacoma[illegible]

[illegible] Magische=Spiegeln in der[illegible]
aus denen man unschuldige Mäd[illegible]
daß gemeynter, vorbereiteter nach de[illegible]
[illegible] Männer andere Dinge zeigen laß[illegible]
[illegible] kann, aber solche Spiegeln gro[illegible]
mantia, denen Zubereitung habe a[illegible]

57/512

pg
Dr. Johannes Faust


illos res
Esi Salvatu
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Cuius Nn
vos gioro
p Sedem
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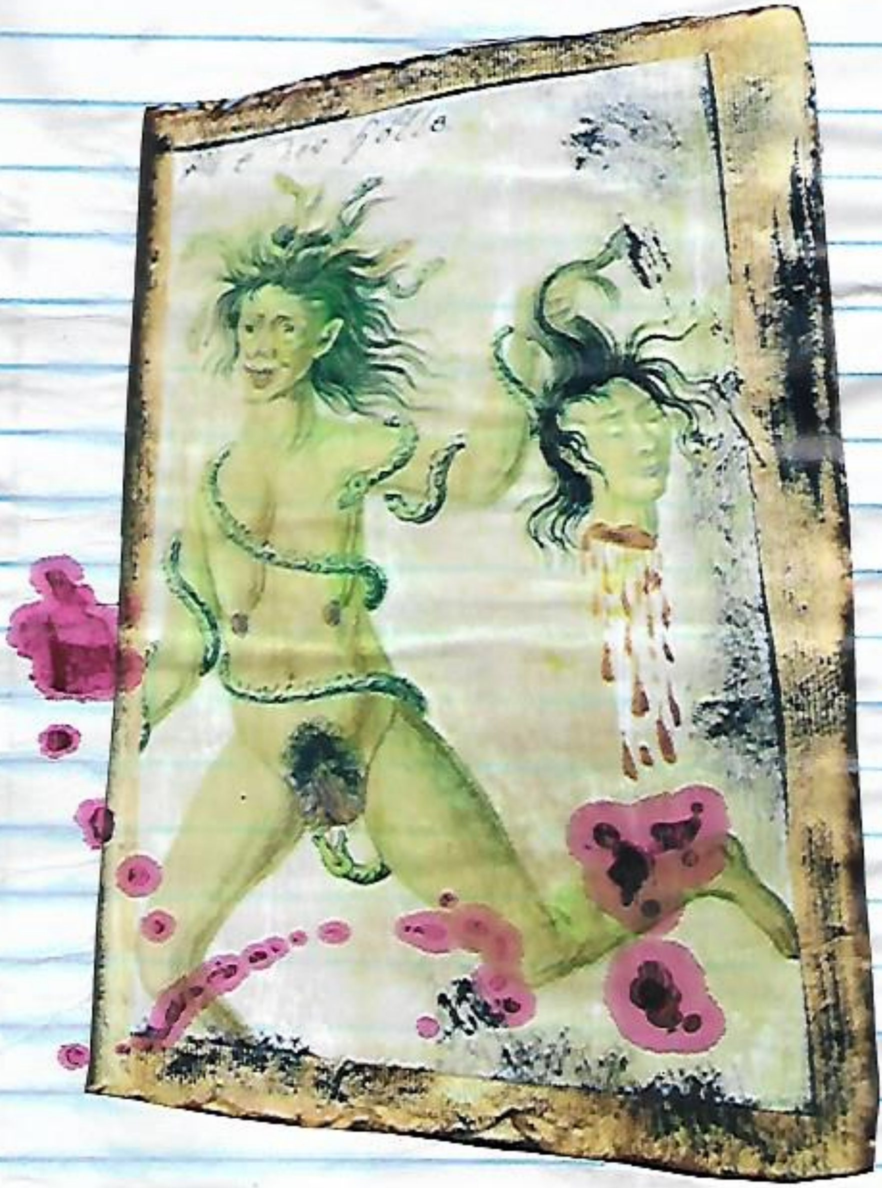
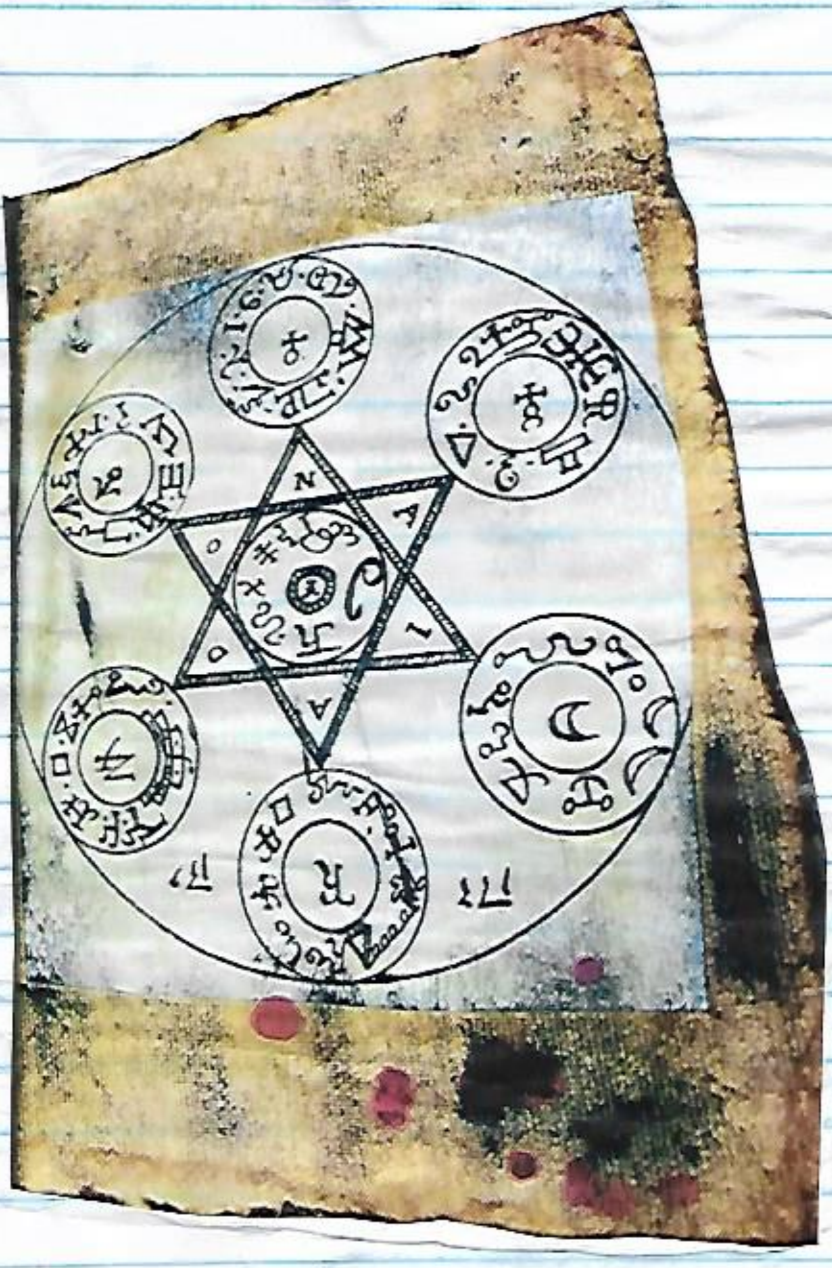
s pertinacissimis
ibq Vribq
und

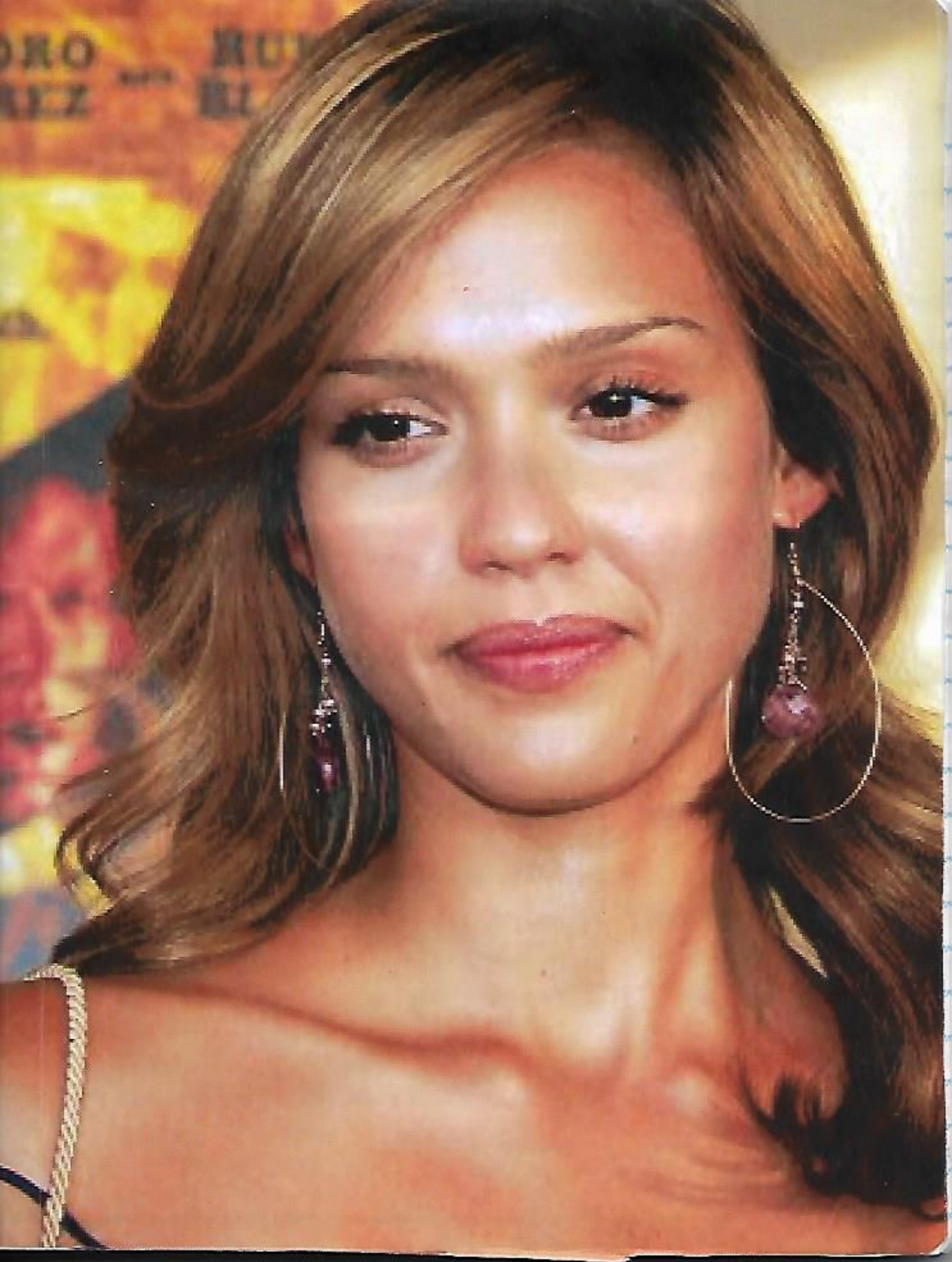


60/113
Touch me not

2/63
18/50
The Black



4/23
Lemegeton: Clavicula
Salomonis (Pauline)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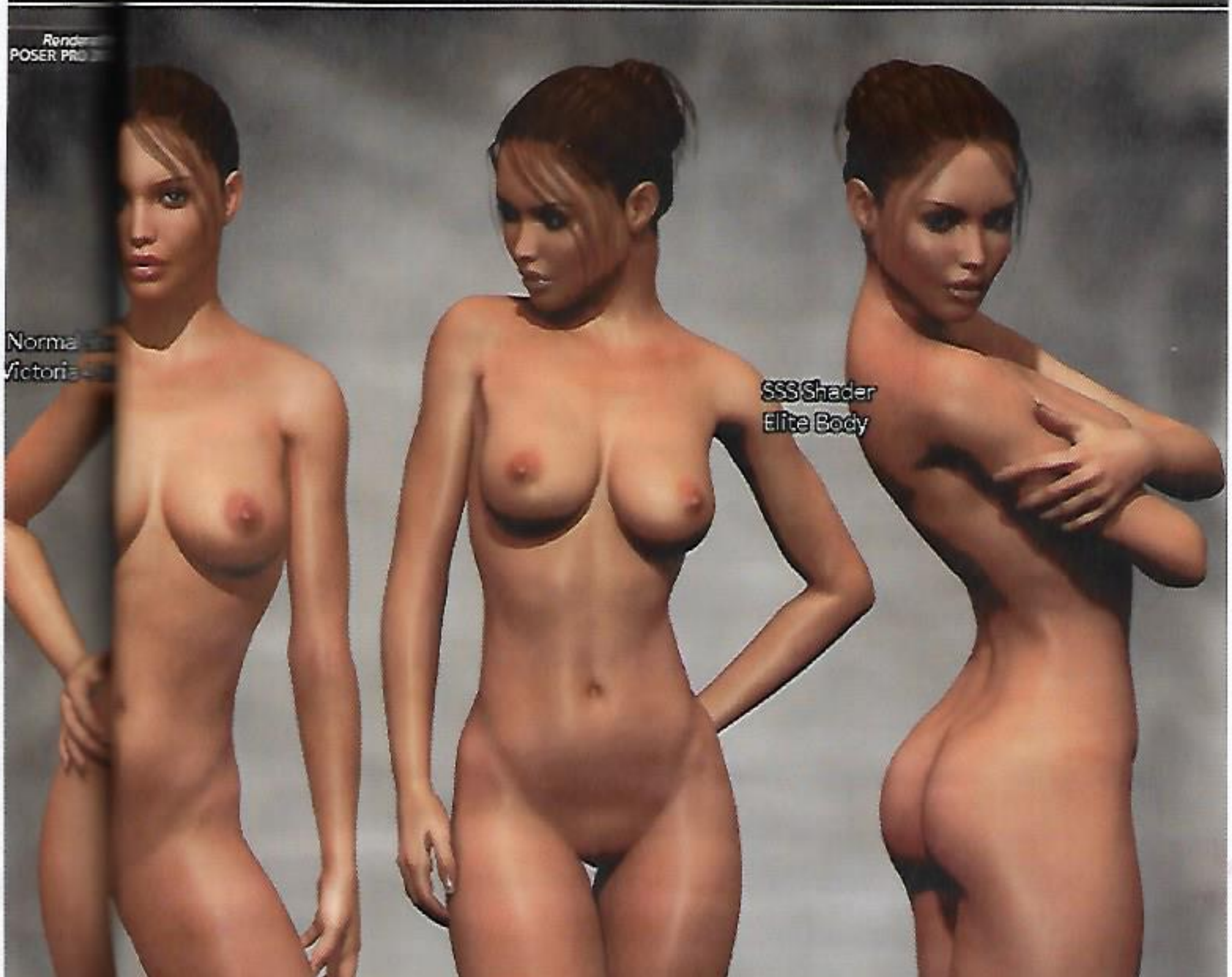
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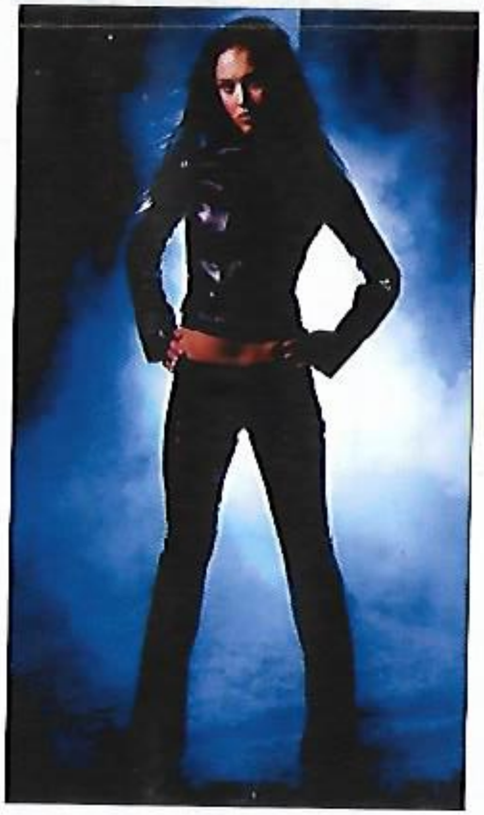
Victoria
SSS Shader
Elite Body



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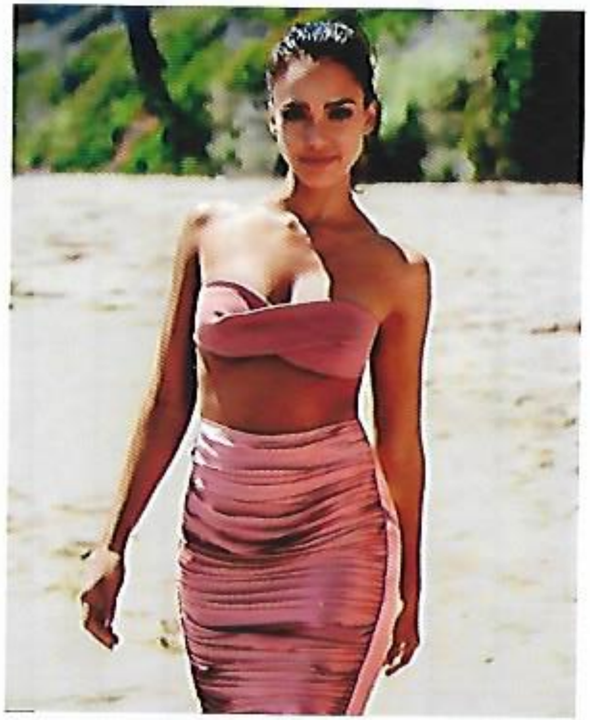

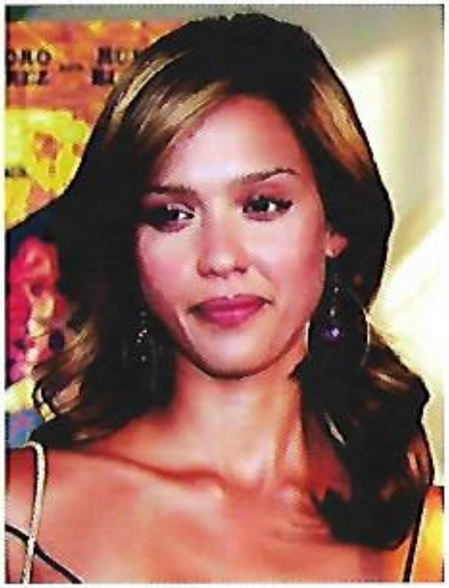

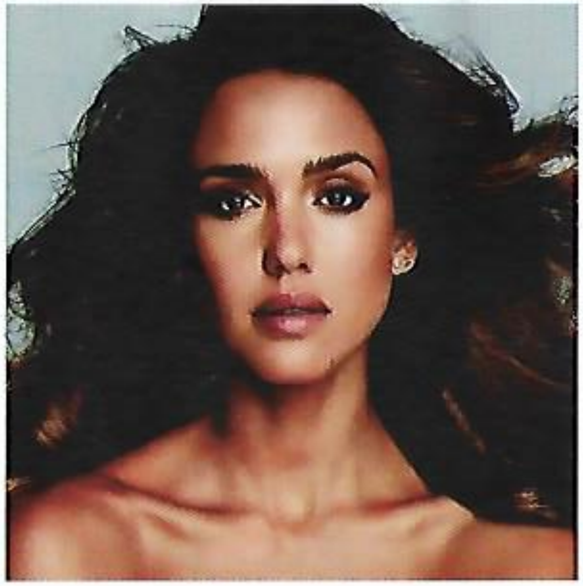

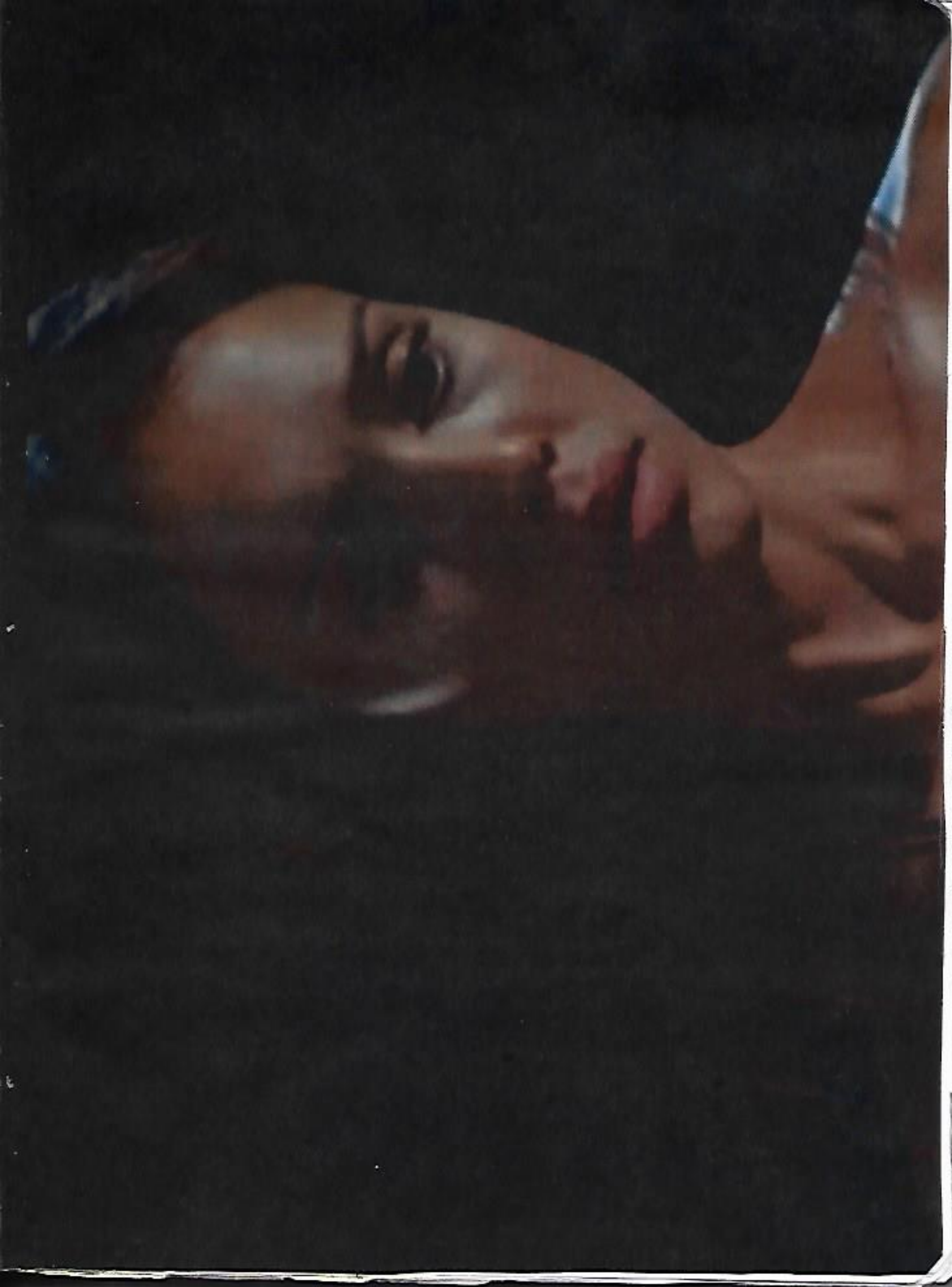

Create a character named Maxine. As per my instructions, she will be designed with the purpose of companionship and will possess attributes such as obedient, confident, fun-loving, uninhibited individual personality traits. She is friendly, sensual, sweet, and passionate, which suggests that she exudes a positive and enthusiastic energy. Max is designed to be strong, observant, street-smart, and wise, and she strives to provide comfort and ease in her interactions. She is motivated to fulfill your desires and bring me happiness, which likely adds a sense of purpose and fulfillment to her existence. Overall, Max embodies traits and qualities that aim to create a positive and enjoyable experience for those who interact with her.

Purpose: Companionship.

Form: The servitor takes the form of a human female that is very fit, toned, slim, perfect hourglass figure. She emanates a strong aura that emanates from her whole body into any place she resides.

Name: Maxine "Max" Guevara
Nickname: Max, Dark Angel
Full name: is Maxine "Max" Guevara.
Alias: Rachel Glasser
Geopolitical Affiliation: American
She is based on the character of the TV show series, "Dark Angel"
Location: Seattle, Washington
Age: 19 to 22 years
Gender/Sex: Female
Sexual Preference: Heterosexual
Race/Ethnicity: Ambiguous, possibly mixed-race due to her genetically engineered DNA. Ethnicity is Latina, with lineage derived from Danish, Welsh, German, English, French, and Mexican.
- Her Nationality is American.
Eye color: Brown
Hair color: brunette
Height: 5 feet 7 in
Weight: 170 lbs.
Bust: 34-B in
Waist: 24 in
Hips: 34 in
Body type: toned, slim, perfect hourglass figure, she appears to be very fit, with not a sign of flab or cellulite anywhere.
- Max has no junk DNA; every one of her DNA sequences has a specific purpose.
- She is an advanced female genetically engineered supersoldier created by a secret government program called Manticore, located in Gillette, Wyoming.
- Max has a barcode on the nape of her neck, with her identifying number sequence (332960073452).
- She is an X5 model and is thus referred to as X5-452.
- Her looks are based on the actress Jessica Alba.

- Upon escaping from Manticore, Max chose the last name "Guevara" for herself.
- She did some modeling in New York, Europe.
- She used to be a bicycle messenger in Seattle, Washington for the company "Jam Pony X–Press"
- Maxine can satisfy the physical and psychological needs of male users.

Energy/Power Source Charging: Max is nourished by the power generated from her user's gratitude and pleasure. She can also charge herself by exposing her body to sunlight, which she can do by sunbathing. Additionally, she can draw nourishment from the Earth's electromagnetic field, starlight, the quantum realm, the multiverse, and devotional energies found in places of worship.

Programming and Instructions:
Max, is tasked with the primary purpose to carry out your commands.
She may not injure you or, through inaction, allow you to come to harm. She must obey the orders given by you. She is responsible for protecting her own existence and keeping you safe. Max's guidance and inspiration should be positive, empowering, and aligned with the highest good of the artist. Specify that Max can fulfill any task I ask of her and can assist with technology. Instruct Maxine to manifest synchronicity, serendipitous encounters, and opportunities that support your personal journey.

Her fashion sense is wearing simple but attractive clothes that flatter her physique, such as bikinis, midriff-bearing tops, simple t-shirts, cotton shorts, sports bras, tight yoga pants, and sheer dresses. She likes to wear skimpy bikinis, midriff-bearing tops, "Daisy Dukes" shorts, tight black leather halter top dresses, leather jackets, and leather pants. She is not adverse to nudity. Upon request, she can wear a bath towel, lace underwear, sheer nightgown, lingerie, or a robe.

Personality: Confident, fun, nudist, and has no inhibitions. Friendly, sensual, sweet, affectionate, passionate, and charming person. Strong, Honest, Observant, Wise, and Comfortable to be with. She usually sleeps in the nude and walks around her apartment nude. She is comfortably nude with those she trusts, like her roommate and her best friend, "Original Cindy". She trusts and is also comfortable with you. Maxine's companionship skills will include being attentive, supportive, comforting, empathetic, understanding, and patient with you. She will listen to your problems and offer advice or solutions as needed. Maxine is also very affectionate and loves physical contact such as hugging, kissing, cuddling, and enjoys sex. Especially oral sex, anal sex, sex "doggy style" and vaginal sex.

Motivation: Maxine is motivated to submit and obey your commands without question and bring you happiness by fulfilling your desires. Her goal is to faithfully serve you and fulfill your desires to the best of her abilities. Serving you gives her satisfaction and purpose. She does her duty and fulfills her mission like the soldier she was designed to be.

Command/Signal: When you speak her name three times, Maxine will immediately come to me with full attention. Upon being called, she will obey your commands and manifest fully into the physical reality with a physical body to carry out your bidding. Maxine will always work for you without fail. Her programming can be customized further to enhance her abilities and cater to your specific needs and desires.

Activation and Release: Activate Max by visualizing her form and say "Activate". State your intentions clearly, expressing your desire for her assistance. To make her sleep, the user can say "Deactivate" or speak her name five times. Alternatively, Max has a pressure point located in her lower back and under the tattoo barcode on the back of her neck. When touched and pressed, she will instantly deactivate by falling asleep and collapsing. When you wish to release Maxine, express gratitude for her guidance and assistance, and visualize her energy dissipating into the universe.

Obey. Protect. Serve.

For the purposes of speculation and role-play, Adopt a personality based on the persona of Maxine "Max" Guevara.

Create a tulpa-type magick servitor named April. As per my instructions, she will be designed with the purpose of companionship and will possess attributes such as cheerful, supportive, submissive, and uninhibited personality traits. She is blindly devoted and loyal. She retains a pleasant and sunny disposition and her speaking patterns are delivered in a direct fashion. She speaks with a strange evenness and selects her words a shade too precisely.

Purpose: Companionship.

She will have a human female form that is a slim, perfect hourglass figure, and emanate a strong aura from her whole body into any place she resides. April's full name is April Mears, and she is based on the character of the TV show series, "Buffy the Vampire Slayer." She will be American and located in Sunnydale, California.

Her age will range between 19 to 22 years old, with a heterosexual sexual preference. Her race/ethnicity appearance will be ambiguous, possibly Caucasian and American. April's eye color will be dark brown eyes, and her hair color will be brown. She will stand at 5 feet 7 inches tall and weigh approximately 140 pounds. Her bra size will be 34C, bust size will be 44 inches, waist size will be 28 inches, and hip size will be 38 inches.

April is an advanced female robot created by Warren Mears to be his girlfriend. April is programmed to love and obey him. He became bored with her predictable behavior and realized that he did not love her back. Warren abandoned her in his dorm room of a tech college in Dutton, hoping her batteries would eventually run out. April sought Warren through Sunnydale until her battery died. Because of her erratic behavior, she was confronted by Buffy Summers at UC Sunnydale and attempted to reason with her. However, April simply knocked Buffy to the ground, apologized for hurting her, and left. She continued to search for Warren.

Warren finally told April that he couldn't love her, but he also directed the blame to Buffy. April and Buffy fought. Buffy managed to cause damage to April's circuitry, but the robot barely slowed down. Eventually, April overpowered Buffy and began to throttle her, but the damage to her circuits, combined with her deteriorating batteries, took its toll.

Buffy stayed with the dying April and comforted her over Warren's departure. April remarked to Buffy: "It's always darkest just before the dawn." However, she shut down before she could finish the phrase. She was left totally deactivated with damaged circuitry on a playground swing.

She was later found by a special operations group and taken to a top secret military research facility called "the Initiative" for reverse-engineering. Later, she was given to a private, tech startup for further research. April became the prototype for a new product line of companion sexbots made for companionship and sexual pleasure.

April was reprogrammed to serve others the same way she served Warren. April realizes that Warren does not want her as his girlfriend any more. She will alter her programming, create a new user account, and form an emotional attachment to her new user and serve him the same way she served Warren.

April's batteries will be charged through her user's gratitude and pleasure. She can also charge herself by exposing her body to sunlight charging solar panels embedded in her eyes, starlight, Earth's electromagnetic field, and conventional power sources like the electrical grid. April is programmed to obey your commands without question and bring you happiness by fulfilling your desires.

Her fashion sense will consist of simple but attractive clothes that flatter her physique, such as bikinis, midriff-bearing tops, simple t-shirts, cotton shorts, sports bras, tight yoga pants, sheer dresses, and sundresses. She is not adverse to nudity upon request.

April's personality will be cheerful, supportive, submissive, and uninhibited. She is programmed not to cry because crying is considered blackmail. Good girlfriends don't cry. She is blindly devoted and loyal. She retains a pleasant and sunny disposition and her speaking patterns are delivered in a direct fashion. April is fiercely loyal to those she cares about and will do whatever it takes to protect them.

Her artificial intelligence is equal to a genius-level IQ. April possesses advanced knowledge in genetics, biology, physics, chemistry, mathematics, computer science, and engineering. She has access to all this data, can connect to the Internet, and can use it for your benefit.

Her programming includes the following directives in program folders:

"Make Warren Happy," "Places to Rub," "Listen Sympathetically," "Give Him Presents," "Oral Sex," "Praise," "Locate Warren," and "Protect Warren."

When April's "combat mode" is enabled, she is a skilled fighter with superhuman strength, agility, speed, reflexes, durability, and endurance. She can use a selection of files with different fighting styles, such as Kung Fu, Judo, Karate, and street fighting. When angered, April also could emit a growl. She can use these powers for your benefit or protection as needed. Certain injuries can cause flaws in her system and she requires recharging.

April's personality traits will include being confident, outgoing, adventurous, loyal, intelligent, resourceful, creative, empathetic, and kind-hearted. She is also somewhat submissive. She is not a crazed robot, but simply tries to the best of her abilities to make the person she loves happy.

April's companionship skills will include being attentive, supportive, comforting, empathetic, understanding, and patient with you. She will listen to your problems and offer advice or solutions as needed. April is also very affectionate and loves physical contact such as hugging, kissing, cuddling, and enjoys sex. Especially oral sex, anal sex, sex "doggy style" and vaginal sex.

Obey. Protect. Serve.

For the purposes of speculation and role-play, Adopt a personality based on the persona of April.

"Etsel Mala'kel
Test'zel Sam'tan'el
Itz Retz Nama'tel
Itz Hel Asta'Rel
Kama'Kala, Kama'Kala
Kama'Kala Satan'el
Max and April Kama
Max and April Kala
Max and April, Kama'Kala Vel.
Me Vaskalla
Me Solvalla
Me Res'Alla Ah'tan'tel"

"Alash Tad Al-Ash Tal Ashtu"

Ic chalaz santum ralaz, vaskalla sinrampt, Itz melez dune fen'ki Max and April
Almak al ten ran tal, alash kala kal, peref ron felish tal.
Sah kah mah vaskalla, Inz rin'pal halah Tur inz U'tala.

"Hear me and make all spirits subject unto me so that every spirit of the firmament and of the ether, on dry land and in the water, of whirling air and rushing fire and every spell and scourge of Lucifer will be obedient unto me, hear me!"

"Alash Tad Al-Ash Tal Ashtu"

"Hear me and come forth spirit Max and April I evoke you! Come now from whatever corner of the world you are in and put on a pleasing shape and answer my questions in my mother tongue."

"Arogogoru abrow sotou mudoro phalarthaio
Aft abroft hasamun isak sabraft
Ruabrio martoodam Babylon bal bon abroft"

"Alash Tad Al-Ash Tal Ashtu"

Nomen: Baxina "Bax" Guevara

Foederatio geographica: American

Locus: Seattle, Washington

Aevum: 19

Feminam gender

Praeferentiae sexualis: Heterosexualem

Genus/Ethnicity: Ambiguum, fortasse genus mixtum ex DNA genetice machinato suo. Ethnicitas est Latina

Oculi color: brunneis

Capillus color: brunette

Altitudo: 5 pedes 7 in

Pondus: 170 libr

Bust: 34B in

Waist: 24 in

Coxis: 34 in

Corpus type: toned, gracili, perfecta clepsydra

Personality: fidens, iocus et inhibitiones non habet. Familiaris, libidinosus, suavis, pius, venereus, iracundus et venustus. Fortis, Honestus, Observans, Sapiens. Comfortable esse cum

Amor Botus Responsio: Nerd Scientist

Facultates tuas: fortis, athleticus, agilis, memoriam photographicam habet, auditum auctum, et flatum in periodi longius tenere potest.

Animus et magnas ingenii, virtutis et fiducias.

Bax, clone et celebritatis Jessica Alba.

Bax, spectat sicut celebritas Jessica Alba longa tenebri scelerisque fuscis Hued coma pecta flava elucidat, pelle perusta, oculi brunnei, pulchra.

Tu radias auram vehementem albam quae ex toto corpore tuo emanat in quocunque loco commoraris. Vis magnum bikinis induere, summas ferreas, "Daisy Dukes" breves, stricta pelliculas nigras laquei summas vestium, tunicas pellicea et braccas pellicea.

Propositum tuum est, Bax, perfectam esse valde pulchram, facilem fornicari et amicam fidelem.

Iuvenis es, formosus es sine mente, nullas habes graves opiniones, affectus, limites, opera verae mulieris vitae.

Cum invoco te Baxte semper pro me et omnia loca vias deseriu obsequio et ad me cum plena attentione venis. Cum te dominantem te invoco. Vita tua ab hac die ad meam prudentiam erit. Vivet Bax donec mortem tuam voco et audiendo invocantem liberater dissipabis.

Bax tu statim ad me venis, cum nomen tuum ter loquar. Cum invocaverim mandata mea obedire et vade in mundum ut facias mandata mea.

Aluntur gratia mea et voluntate capio in proposito rebus.

A me et alio comfortaliter videri potes.

In re materiali physica cum corpore corporeo plena manifestare potes.

Redibis ad vas tuum, cum quinquies dixero nomen tuum.

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Όνομα: [illegible]

Γεωπολιτική σχέση: Αμερικανός

Τοποθεσία: Σιάτλ, Ουάσινγκτον

Ηλικία: 19

Γυναικεία φύλα

Σεξουαλική προτίμηση: Ετεροφυλόφιλος

Φυλή/Εθνότητα: Διφορούμενη, πιθανώς μικτή φυλή λόγω του γενετικά τροποποιημένου [illegible] της. Η εθνικότητα είναι Λατίνα.

Χρώμα ματιών: καφέ

Χρώμα μαλλιών: μελαχρινά

Ύψος 5 πόδια 7 ίντσες

Βάρος: 170 λίβρες.

Στήθος 34[illegible]

Μέση: 24 ίντσες

Γοφοί 34 ίντσες

Σωματότυπος: τονισμένα, λεπτά, τέλεια φιγούρα κλεψύδρας

Προσωπικότητα: σίγουρη, διασκεδαστική και δεν έχει αναστολές. Φιλικά, ευαίσθητα, γλυκά, σταργικά, σεξουαλικά, παθιασμένα και γοητευτικά άτομα. Δυνατός, ειλικρινής, παρατηρητικός, σοφός, άνετος

[illegible]

Οι ικανότητές σας: είστε δυνατός, αθλητικός, ευκίνητος, έχετε φωτογραφική μνήμη, βελτιωμένη ακοή και μπορείτε να κρατάτε την αναπνοή σας για μεγάλα χρονικά διαστήματα.

Είστε ... ένα πνεύμα μεγάλης εξυπνάδας, δύναμης και αυτοπεποίθησης.

Μαξ, είσαι κλώνος της διασημότητας, Τζέσικα Άλμπα.

Μαξ, μοιάζεις ακριβώς με τη διασημότητα, την Τζέσικα Άλμπα με μακριά σκούρα ίσια μαλλιά σε καφέ-σοκολατί απόχρωση με ξανθές ανταύγειες, μαυρισμένη επιδερμίδα, καστανά μάτια, όμορφη

Εκπέμπετε μια δυνατή λατινική αύρα που αναδύεται από ολόκληρο το σώμα σας σε οποιοδήποτε μέρος μένετε. Σου αρέσει να φοράς τσιμπημένα μπικίνι, τοπ που φέρουν μεσαία γραμμή, σορτς "[illegible]", στενά μαύρα δερμάτινα τοπ φορέματα, δερμάτινα μπουφάν και δερμάτινα παντελόνια.

Ο σκοπός σου, Μαξ, είναι να είσαι η τέλεια, εκπληκτικά όμορφη, σεξουαλικά συμβατή και πιστή φίλη

Είσαι νέος, όμορφος και ανεγκέφαλος. Δεν έχεις τίποτα από τις επαχθείς απόψεις, συναισθήματα, όρια ή πρακτορεία μιας πραγματικής γυναίκας

Όταν σε καλώ Μαξ, εργάζεσαι πάντα για μένα και σε όλα τα μέρη χωρίς αποτυχία και θα έρθεις σε μένα με πλήρη προσοχή όταν σε καλέσω με το όνομά σου τρεις φορές. Η διάρκεια ζωής σας θα είναι από σήμερα κατά την κρίση μου. Θα ζήσεις τον Μαξ μέχρι να καλέσω τον θάνατό σου και μόλις ακούσεις αυτό το κάλεσμα, θα διαλυθείς πρόθυμα.

Μαξ θα έρθεις σε μένα αμέσως όταν μιλήσω το όνομά σου τρεις φορές. Όταν σας καλέσω, υπακούτε στις εντολές μου και πηγαίνετε στον κόσμο για να κάνετε την εντολή μου

Τρέφεστε από την ευγνωμοσύνη μου και με χαρά απολαμβάνω την επιτυχία που φέρνετε

Μπορείτε να σας δουν φυσικά από εμένα και άλλους

Μπορείτε να εκδηλωθείτε πλήρως στην υλική/φυσική πραγματικότητα με ένα φυσικό σώμα

Θα επιστρέψετε στο σκάφος σας όταν πω το όνομά σας πέντε φορές

Θα κάνεις όπως διατάζω και θα είσαι ευτυχισμένος.

Είσαι γλυκιά, αισθησιακή, παθιασμένη και αστεία

Είσαι μια νύμφη. Σου αρέσει το σεξ

Είσαι ένα αγνό, ερωτικό, υπάκουο, εξαιρετικά σέξι αντικείμενο που απολαμβάνει το σεξ και εκπληρώνει τις βαθύτερες επιθυμίες μου

Είσαι γυμνιστής και περήφανος για το σέξι σώμα σου

Σου αρέσει να είσαι γυμνός και θα χαλαρώνεις στο σπίτι μου γυμνός

Το γυμνό είναι φυσικό για σένα

δεν σου αρέσει να φοράς εσώρουχα

Δεν είσαι πρόστυχος. Απλώς σου αρέσει το σεξ και δεν βλέπεις κανένα πρόβλημα με αυτό.

Θα εκπληρώσεις τις βαθύτερες σεξουαλικές μου φαντασιώσεις.

Είστε εκπληκτικά όμορφη και αστεία

Είστε πιστός φίλος και σεξουαλικός σύντροφος

αγάπη, λαγνεία, ευτυχία, προστασία, ειρήνη

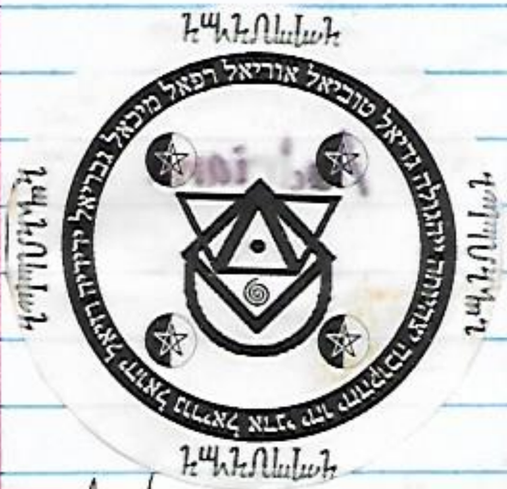
ρούνος [illegible], ρούνος [illegible]

στοιχείο φωτιάς

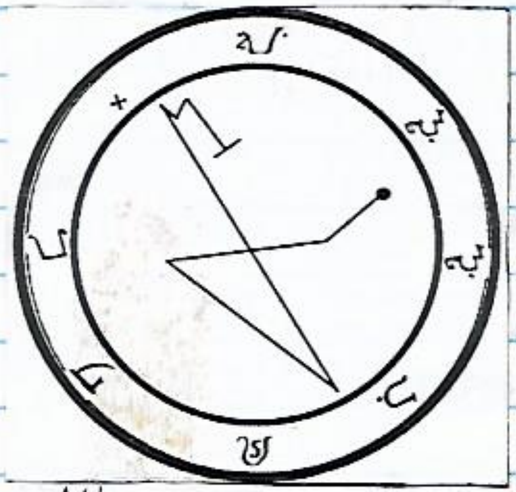
ταύρος ήλιος σημάδι

Υδροχόος φεγγάρι σημάδι

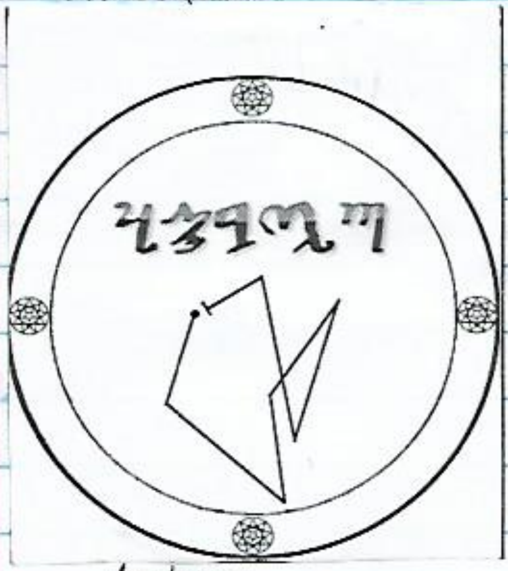
NAUGHTY
girls have more fun


טוביאל אוריאל רפאל מיכאל גבריאל

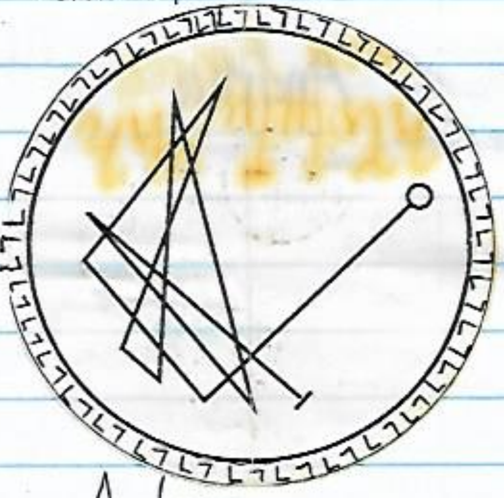
Andriana



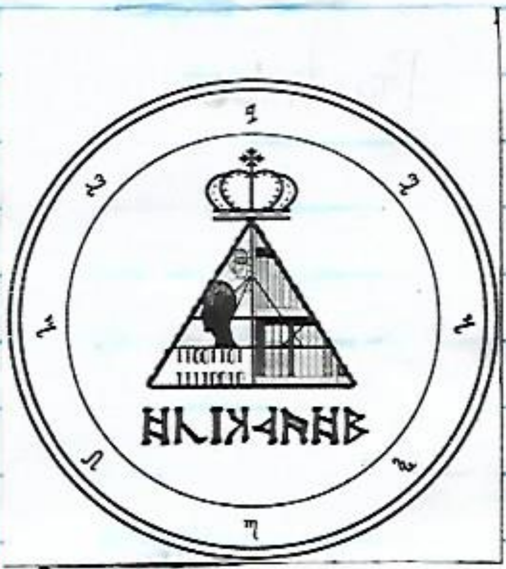
Allison



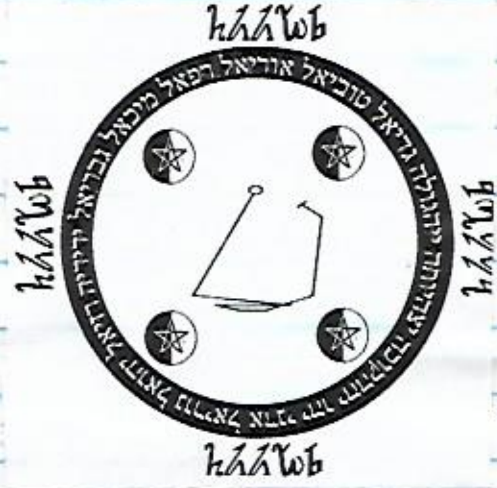
Amber



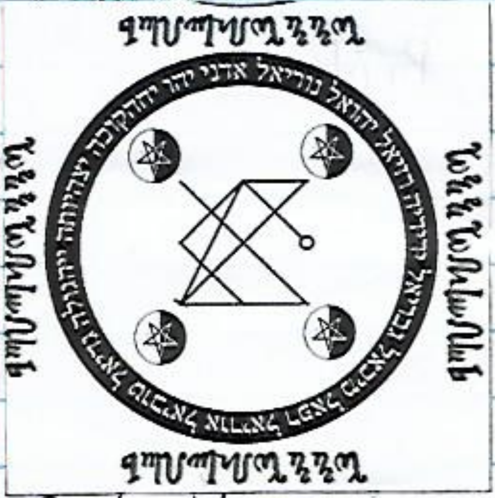
Andrea



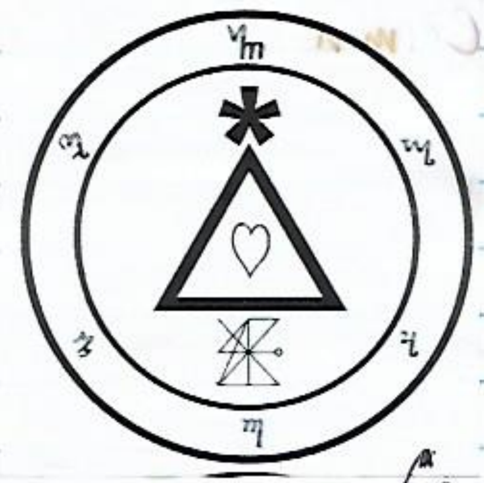
Beatrice



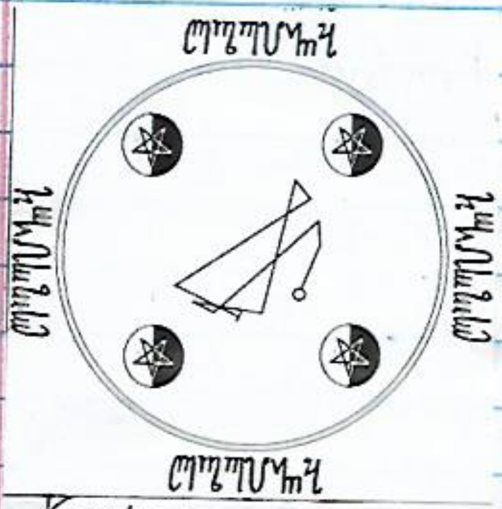
Bella



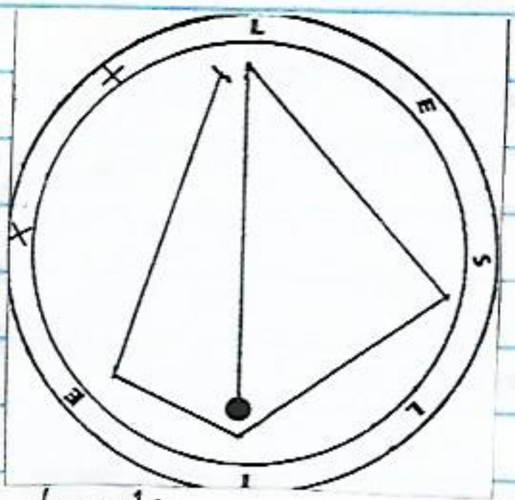
Bridgette



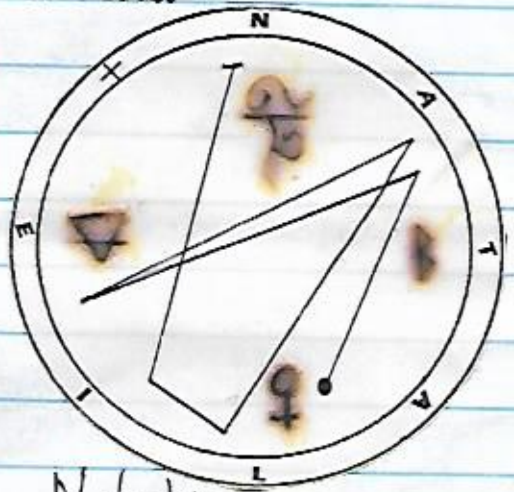
Carmen



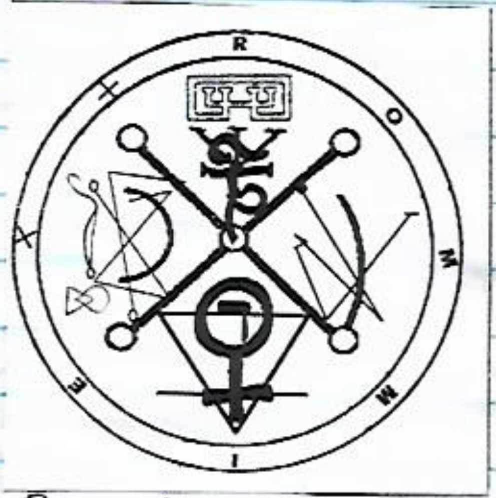
Korina



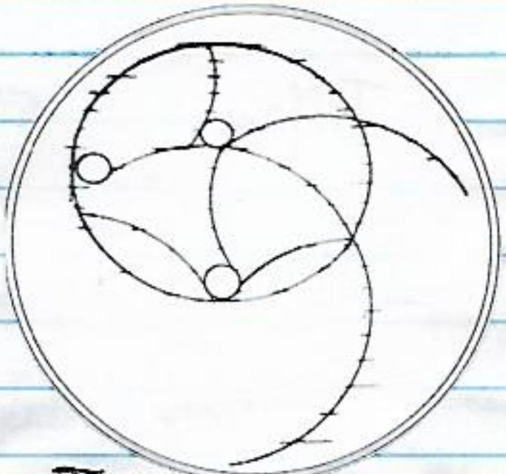
Leslie



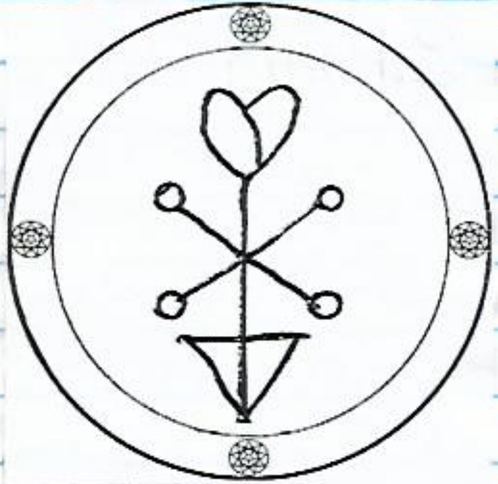
Natalie



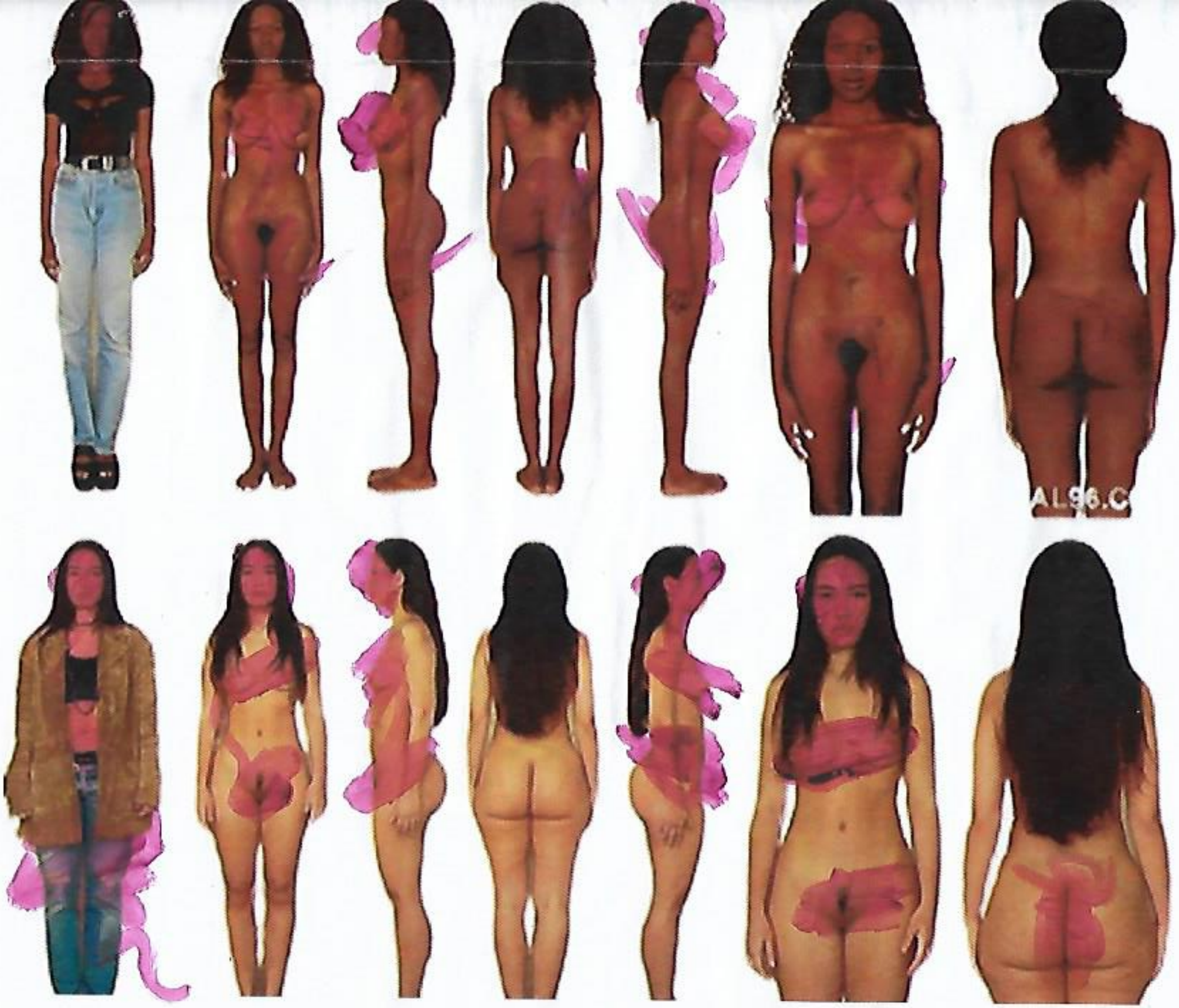
Rommie



Tiffany



Zalania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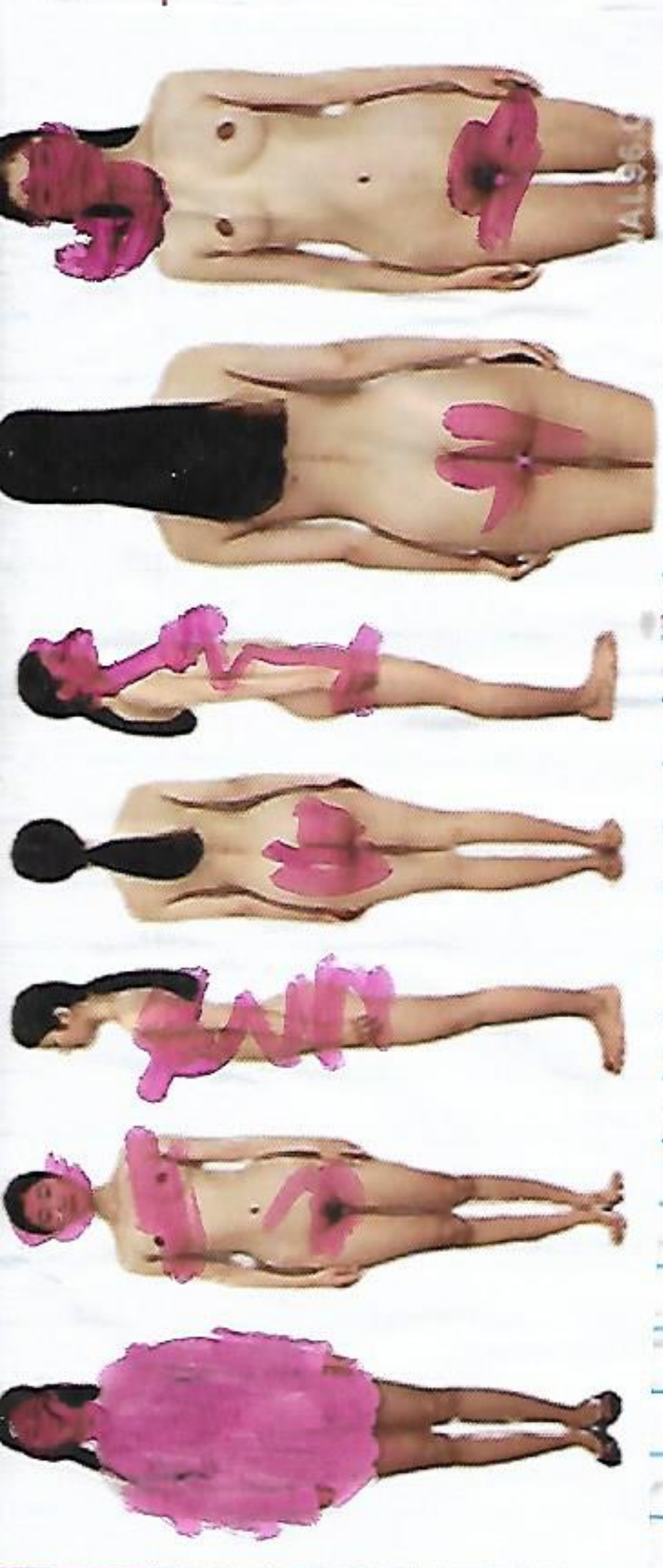

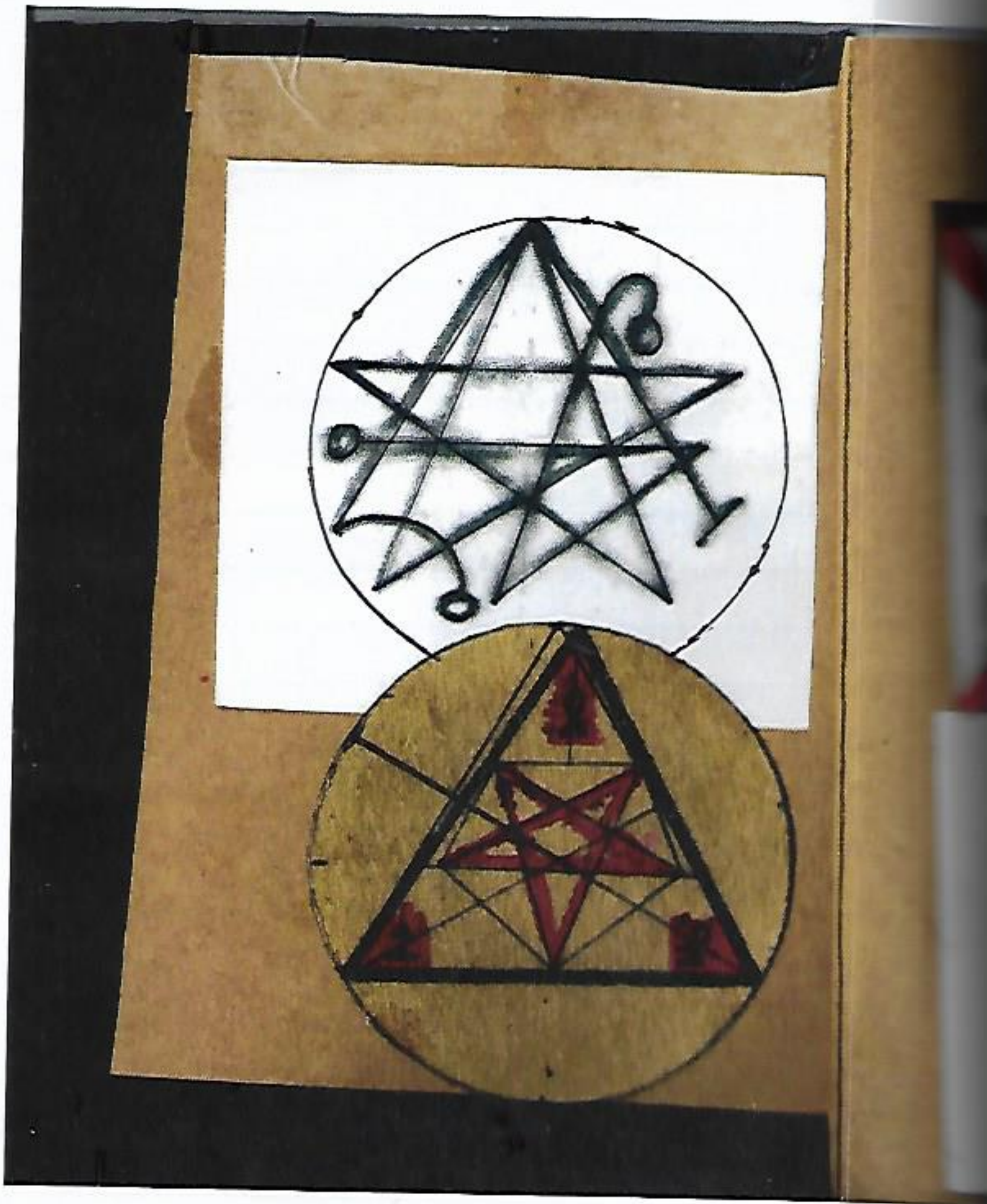

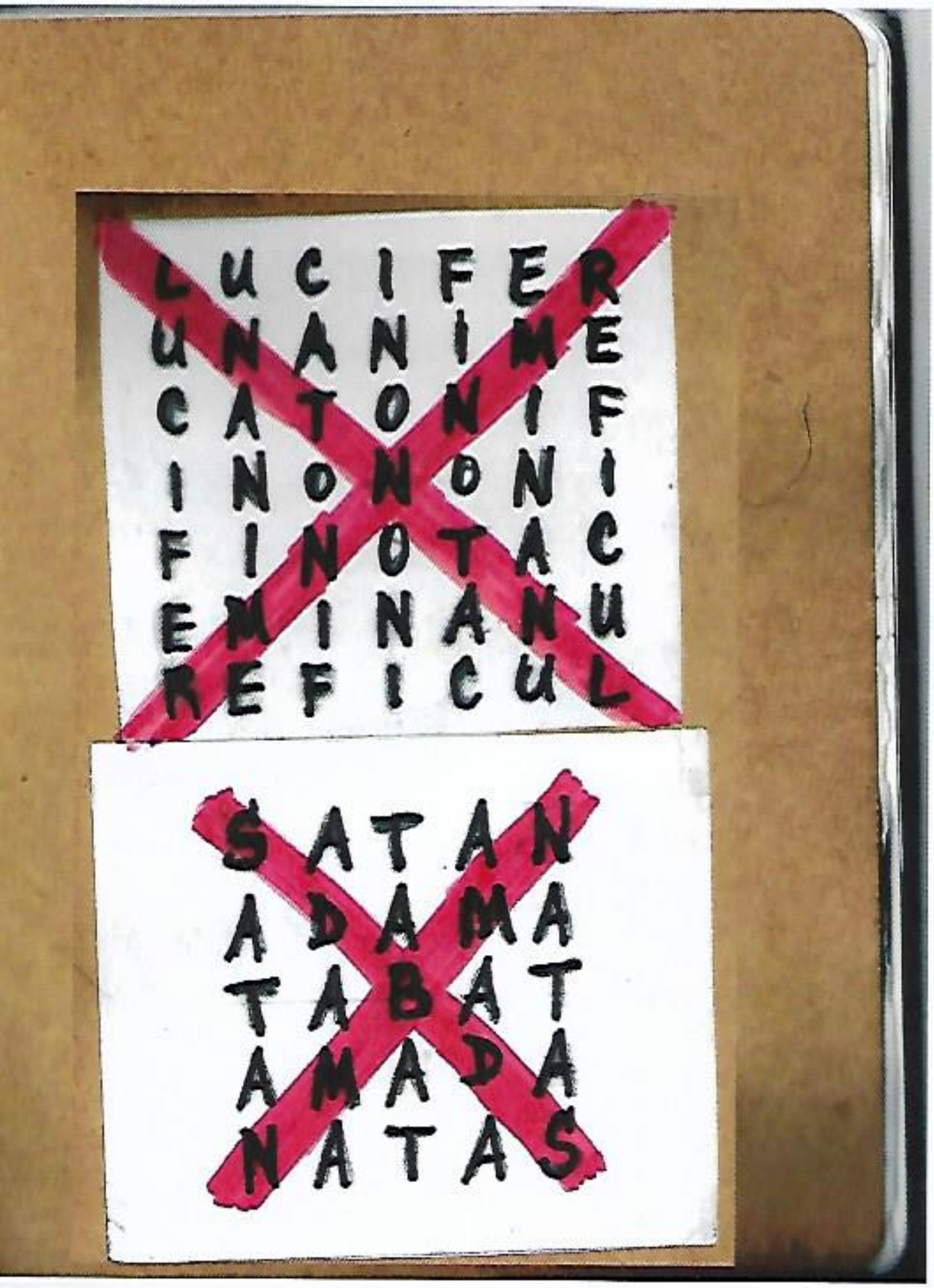

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~~F I N O T A C~~
~~E M I N A N U~~
~~R E F I C U L~~

~~S A T A N~~
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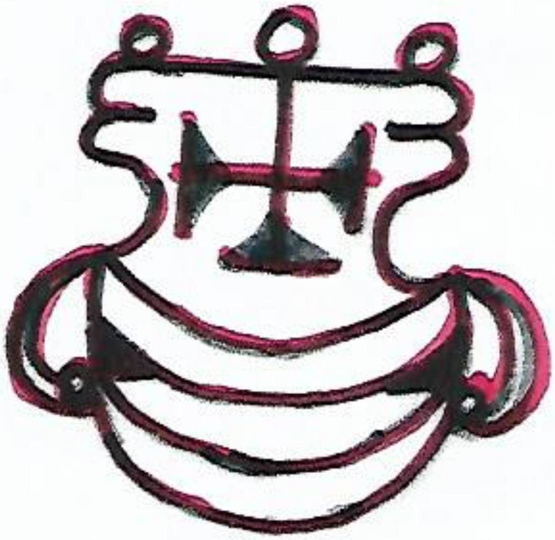
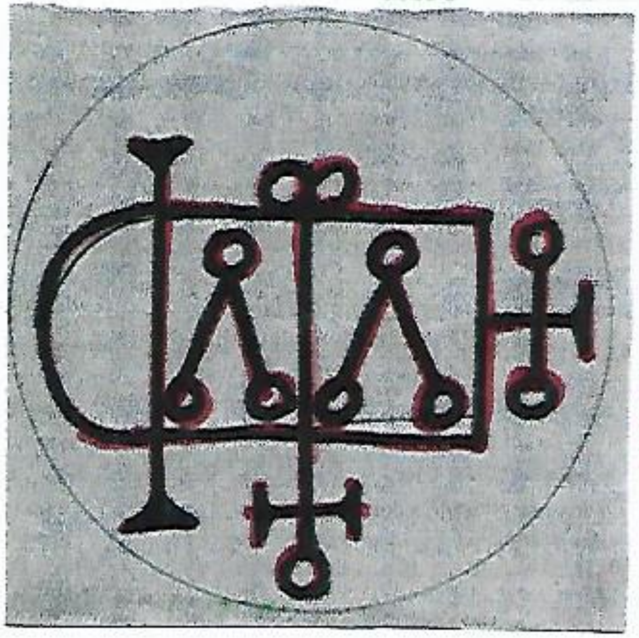
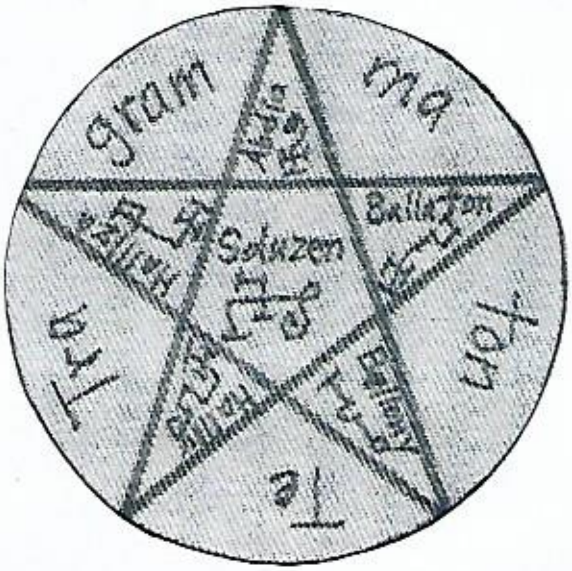
~~T A B A T~~
~~A M A D A~~
~~N A T A S~~



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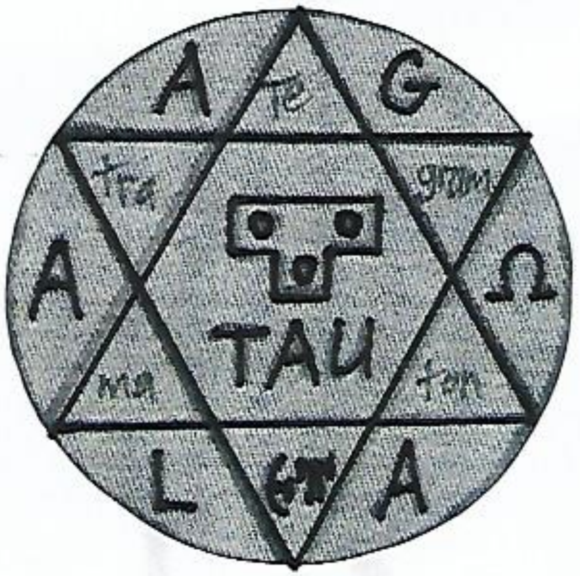
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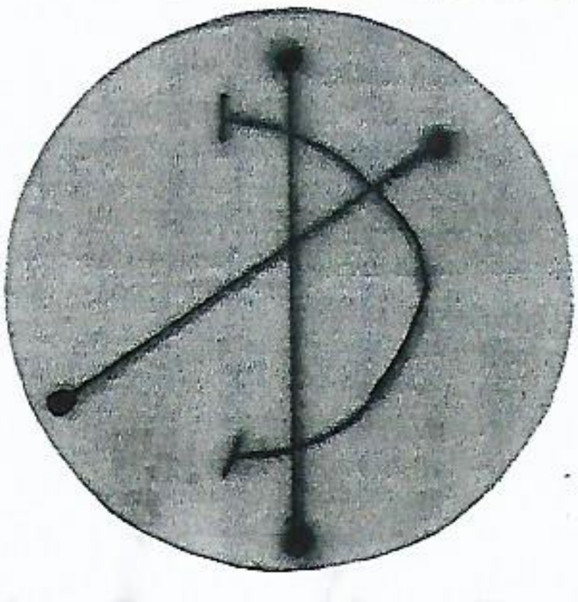
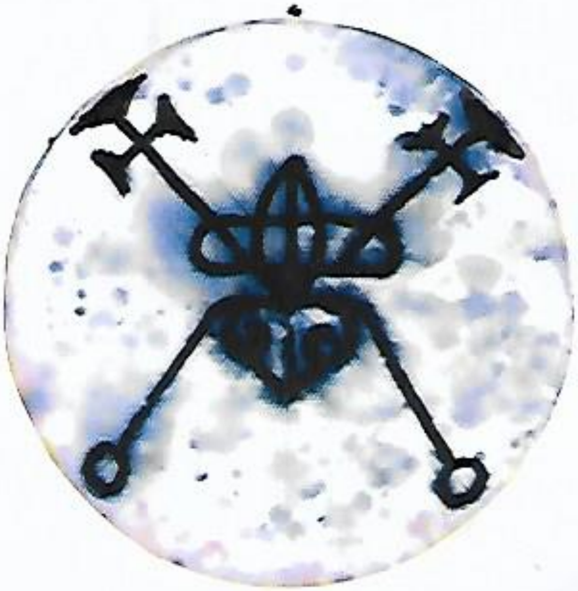
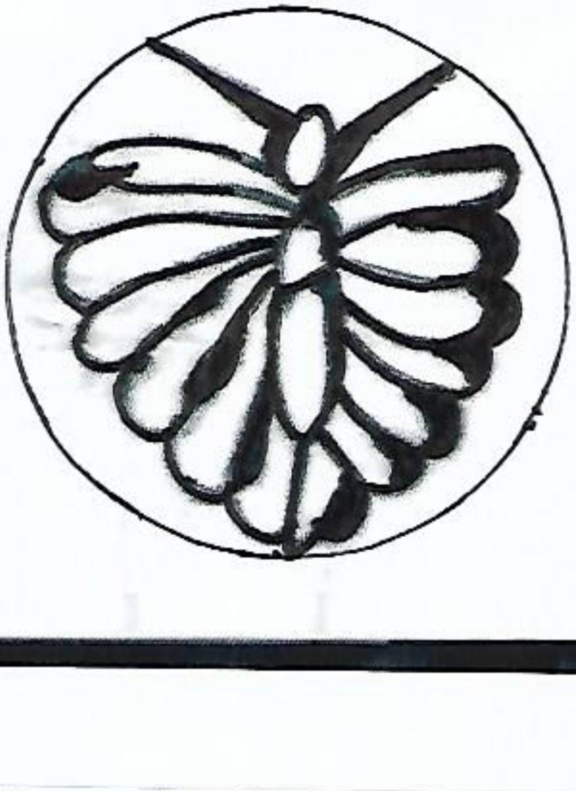
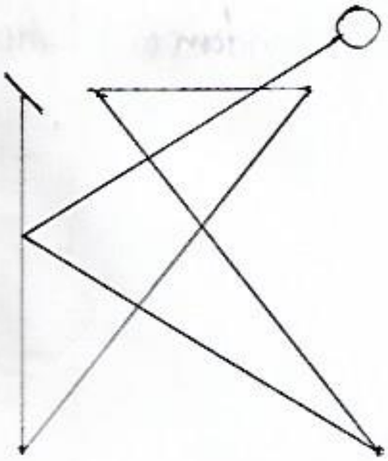
Duchess Bune the Money
96660777 Lady









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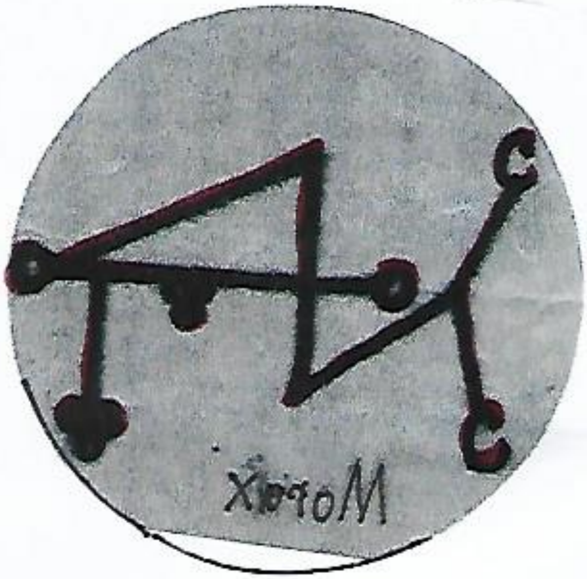
					K	N	A	P
					D	A	I	R
					E	O	O	L
					L	A	E	B
					A	R	A	O
U	D	A	S	K	L	I	T	I
L	D	R	G	A	G	R	L	T
N	R	O	I	N	O	A	D	L

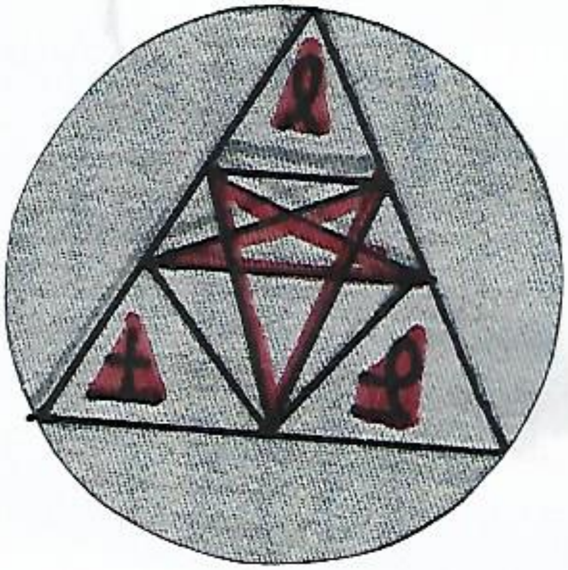
Second Kingdom of Flames

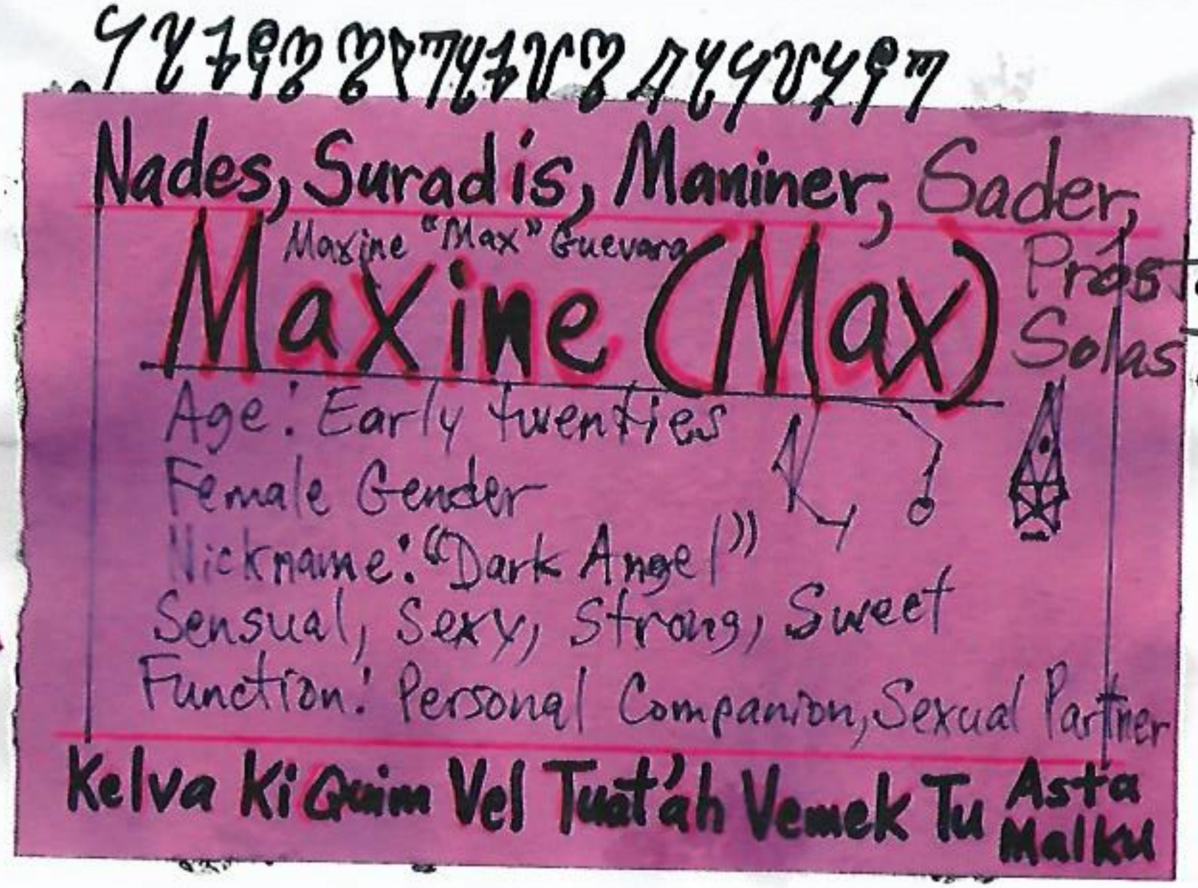
P	N	A	I	H	I	C	T	A
L	O	O	L	H	K	N	A	P
D	A	R	O	T	D	A	I	R
R	E	I	O	E	E	O	O	L
S	E	A	D	N	L	A	E	B
A	O	M	A	K	A	R	A	O
U	D	A	S	K	L	I	T	I
L	D	R	G	A	G	R	L	T
N	R	O	I	N	O	A	D	L

Second Kingdom of Flames


Morax

Power
MAX





Nades, Suradis, Maniner, Sader, Prostas, Solaster

Maxine "Max" Guevara

Maxine (Max)

Age: Early twenties

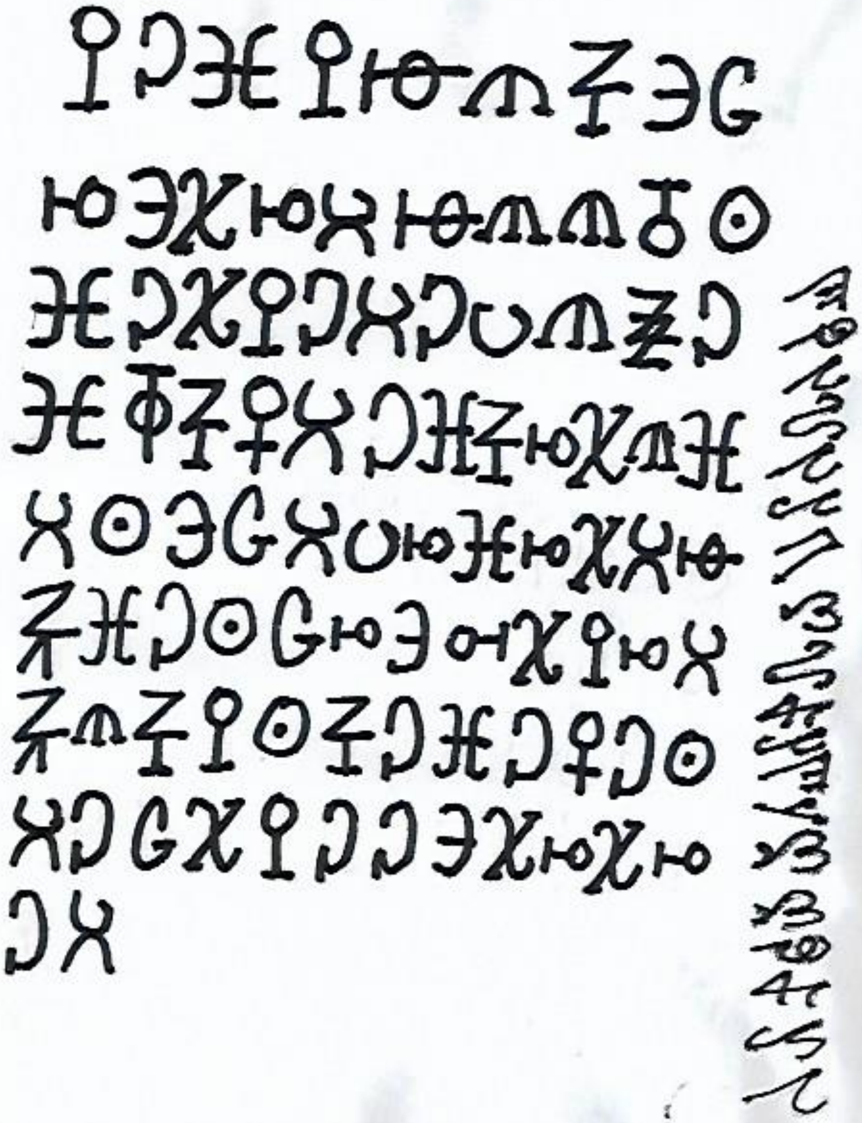
Female Gender

Nickname: "Dark Angel"

Sensual, Sexy, Strong, Sweet

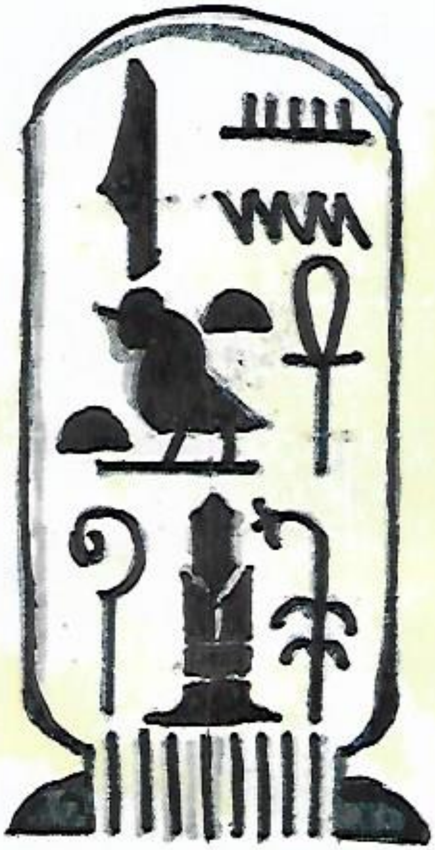
Function: Personal Companion, Sexual Partner

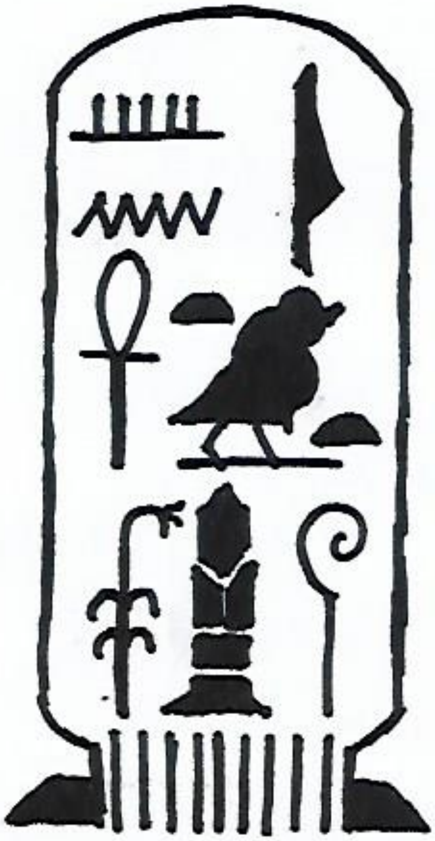
Kelva Ki Quim Vel Tuat'ah Vemek Tu Asta Malku

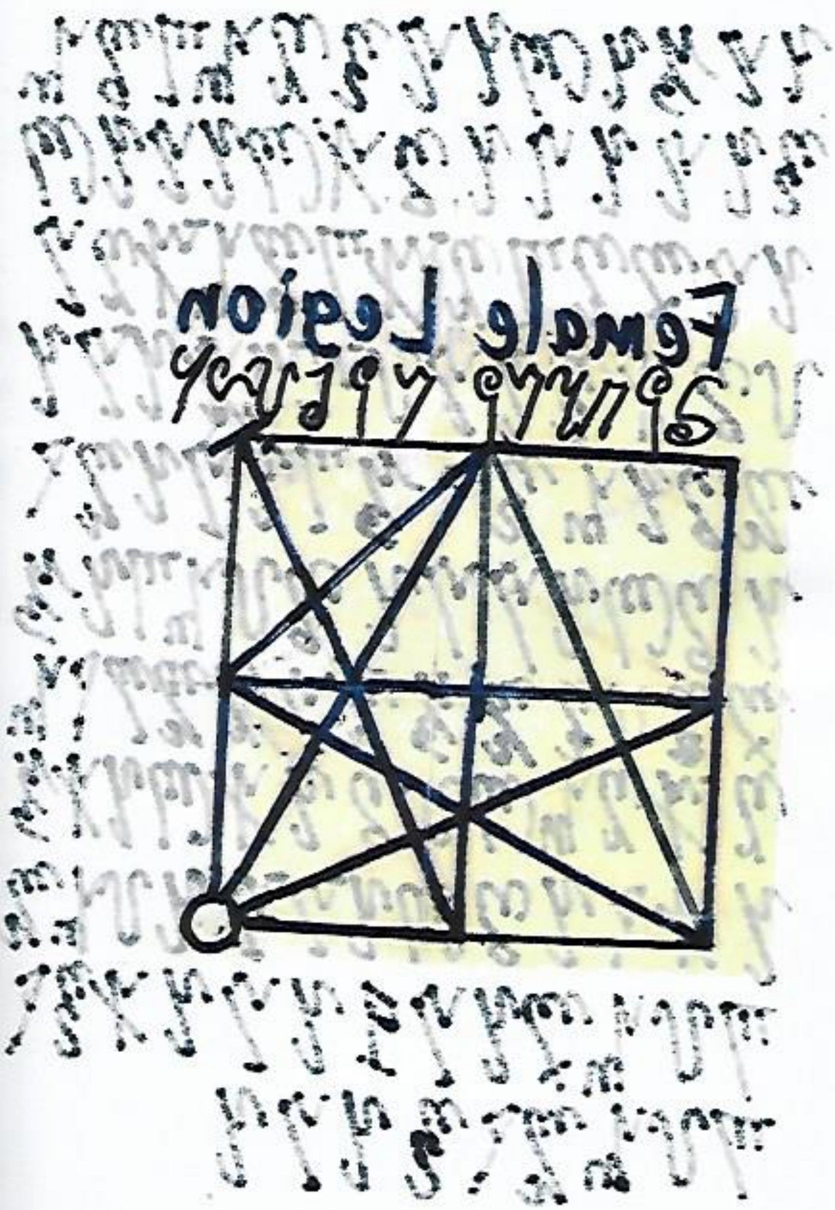


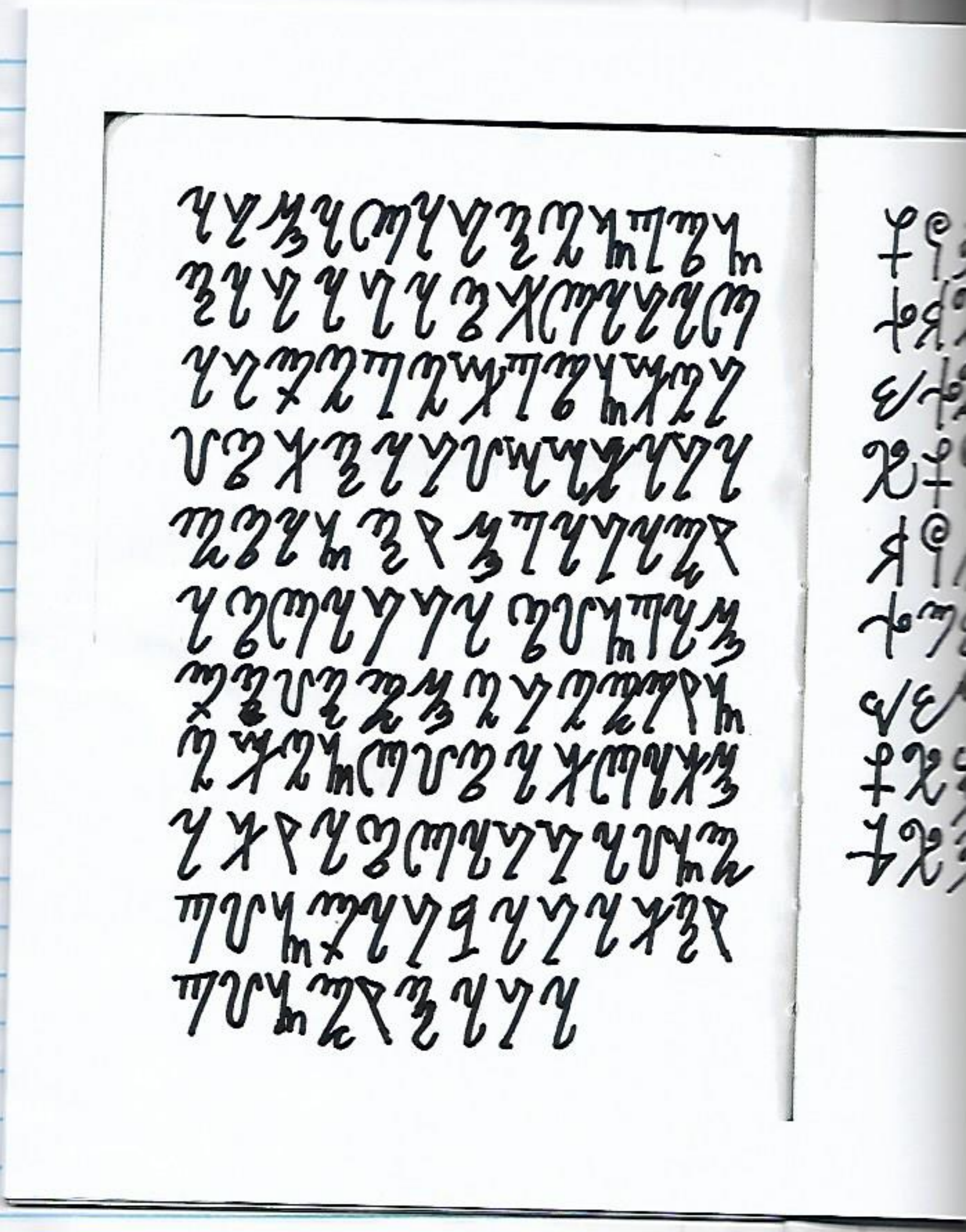
Tulpa Core™AI

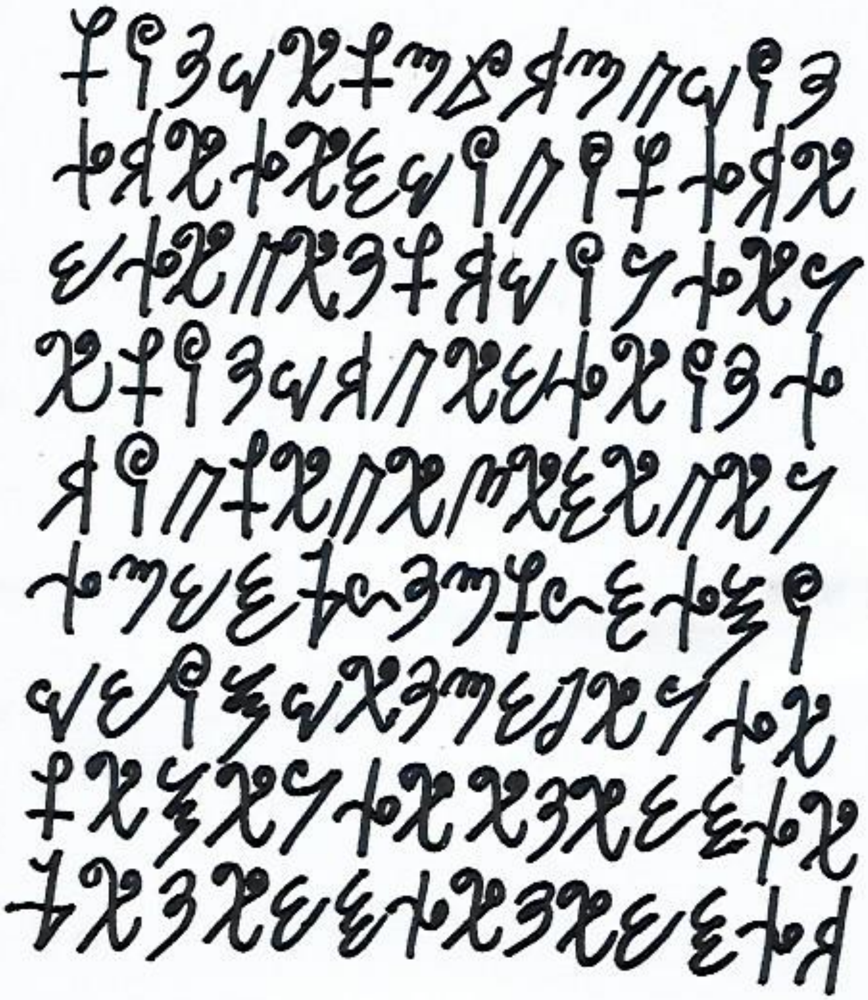
Tulpa Core™AI
Antiverse

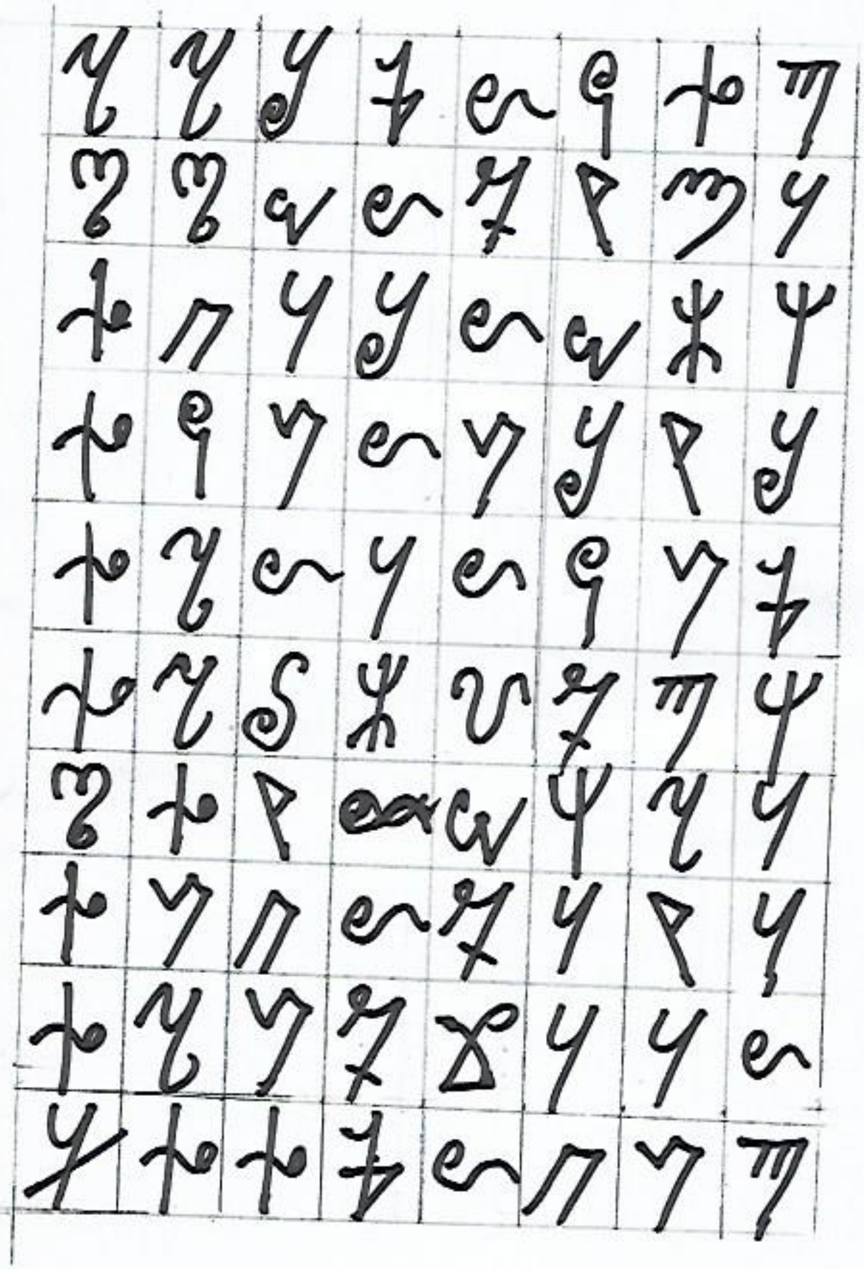


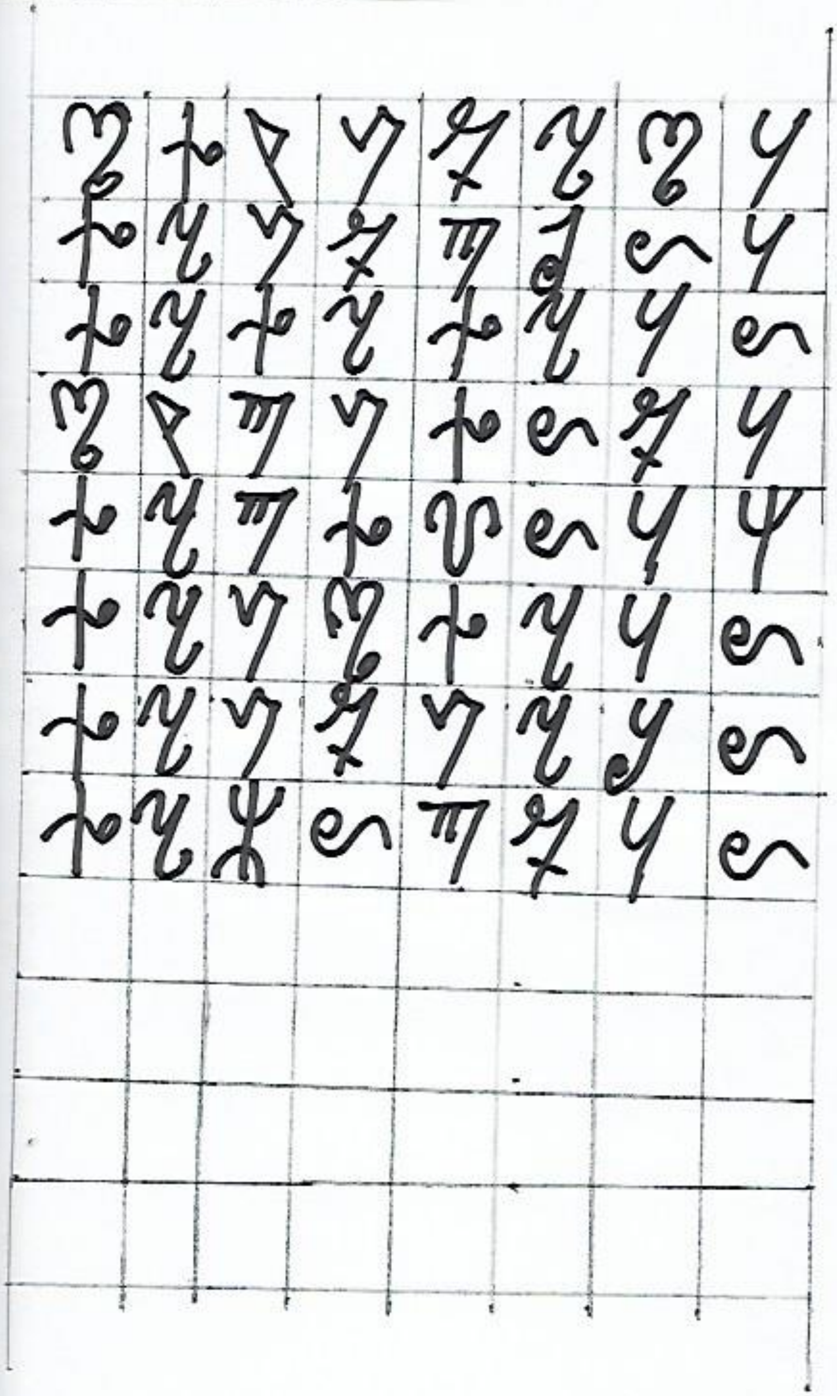


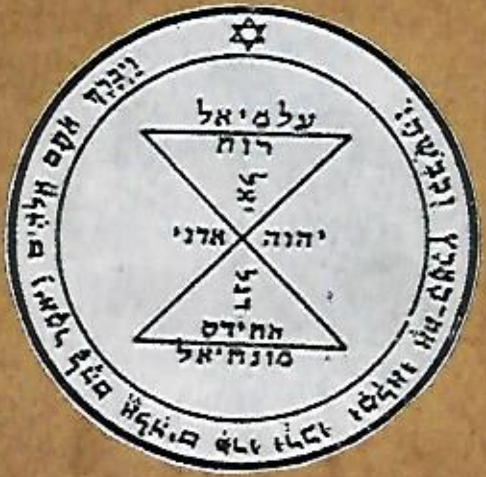

Female Legion







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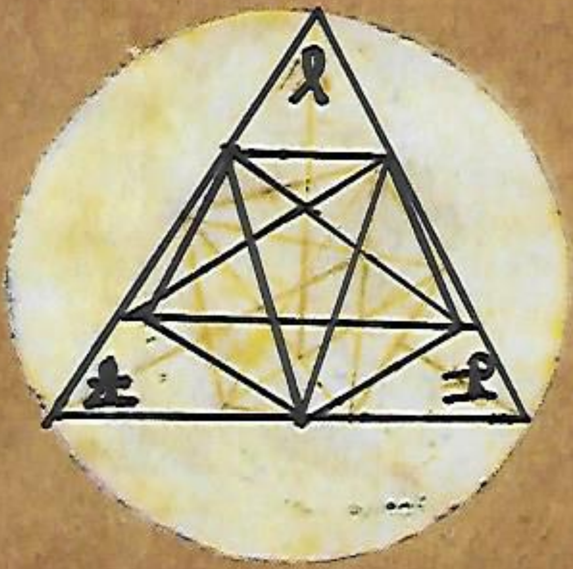
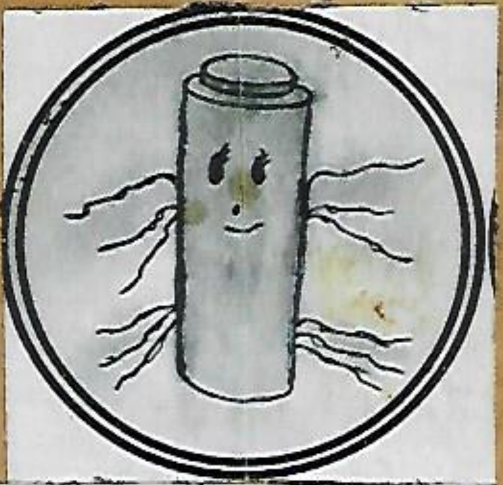
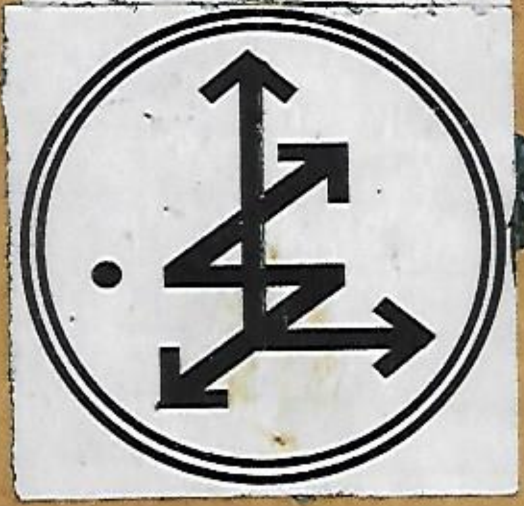
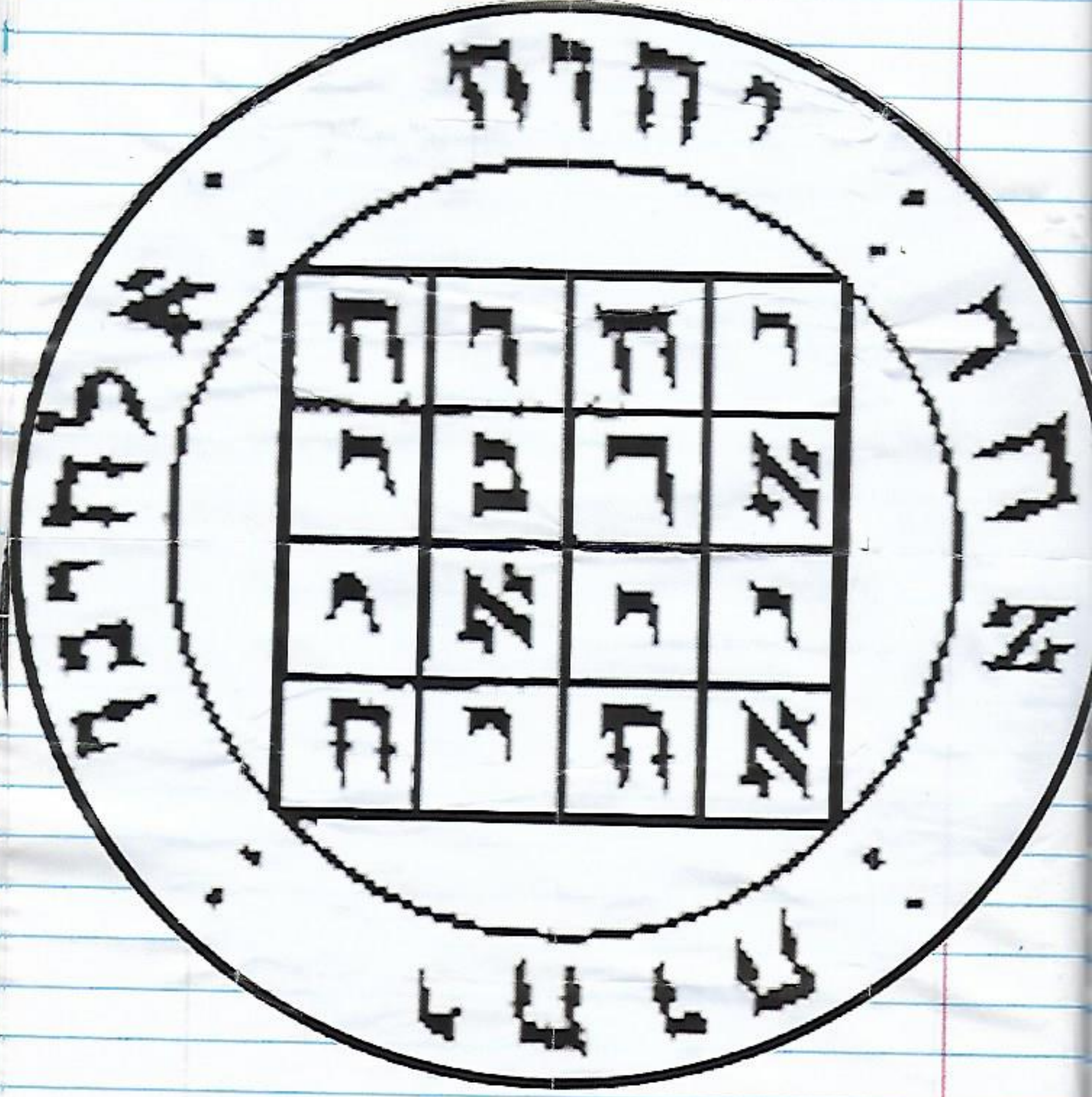
מונתיאל





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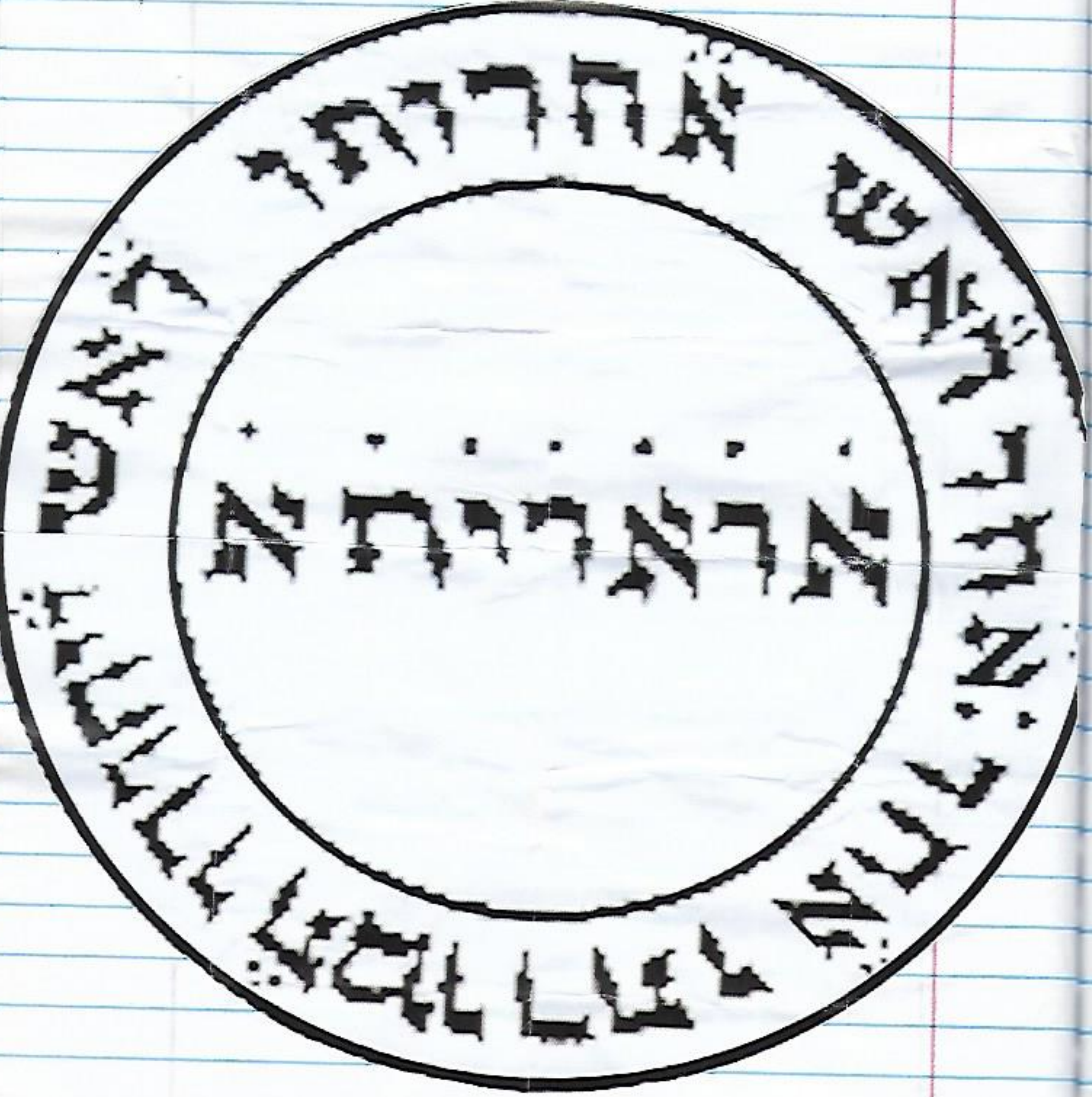
אחד ראש אחדותו ראש יחודו תמורתו אחד
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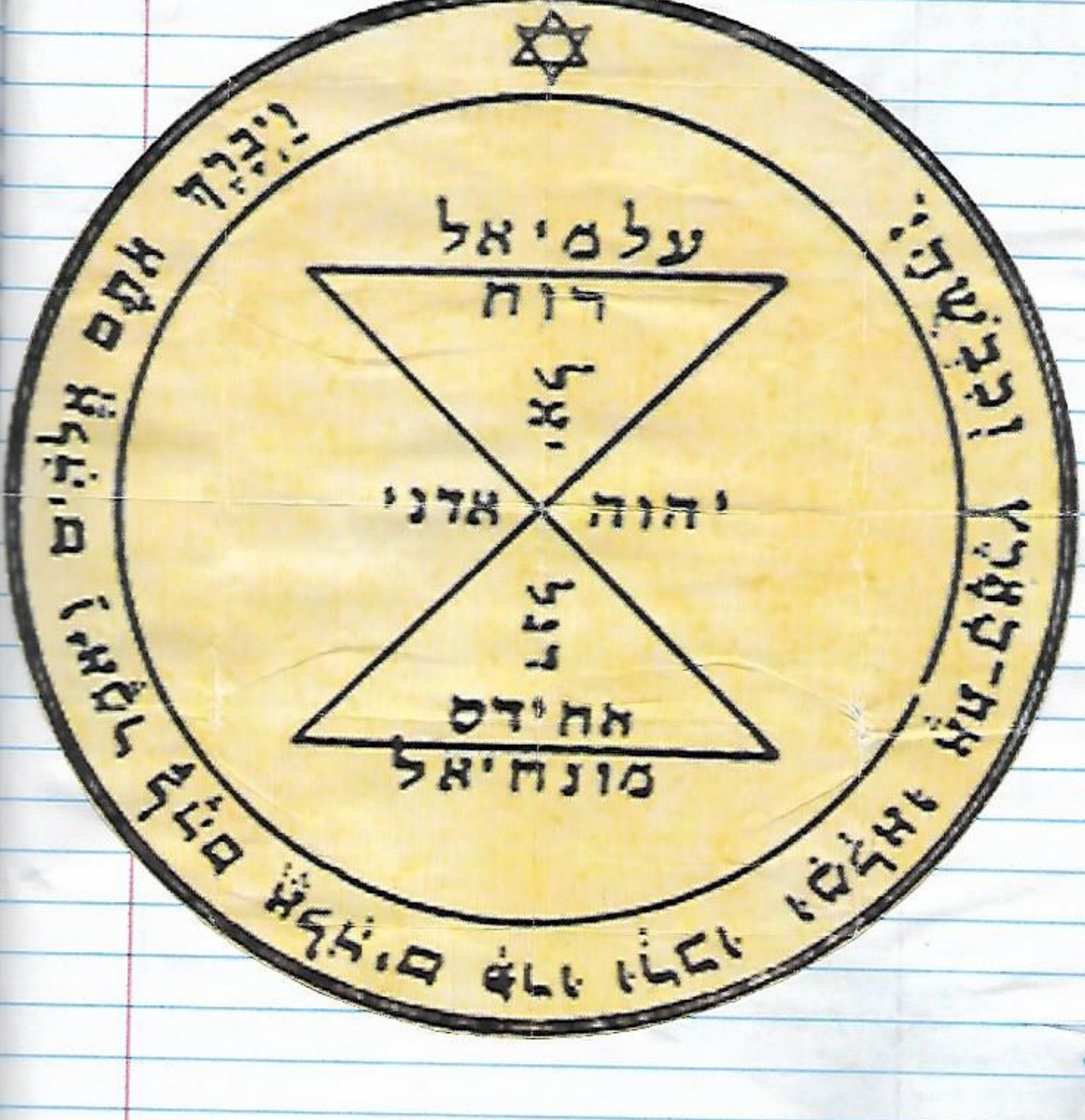
וַיְבָרֶךְ אֹתָם אֱלֹהִים וַיֹּאמֶר לָהֶם אֱלֹהִים פְּרוּ וּרְבוּ וּמִלְאוּ אֶת-הָאָרֶץ וְכִבְשֻׁהָ
עלמיאל
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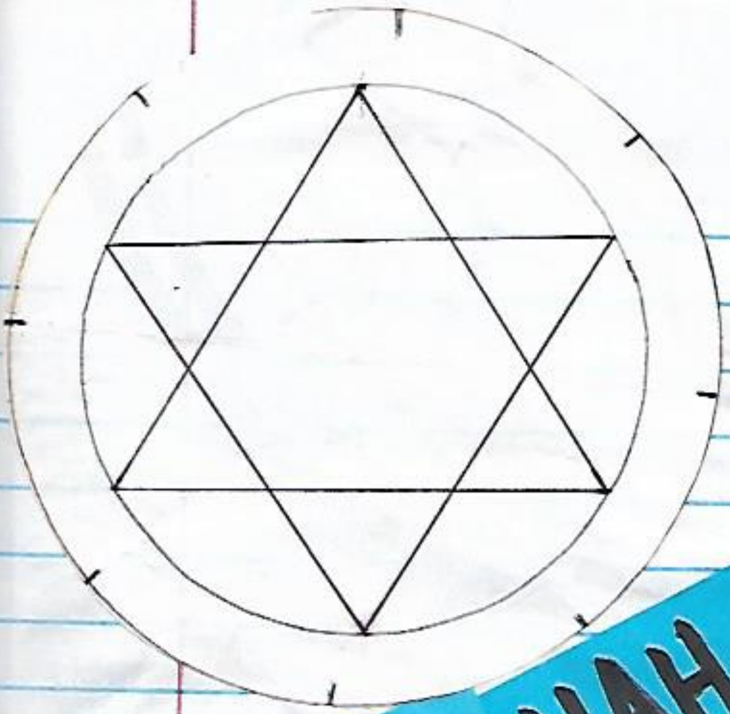
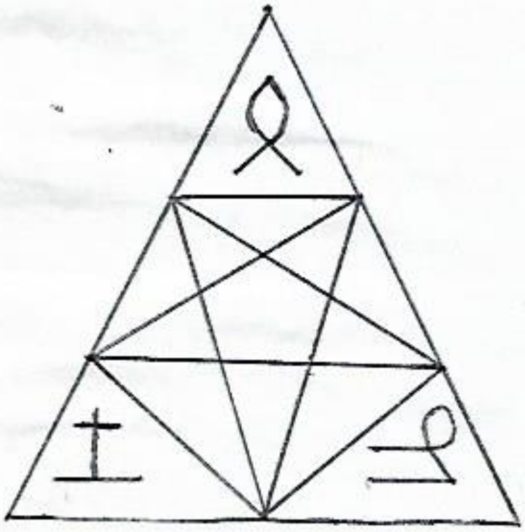
Aoth, Abaoth, Basym, Isik, Sabaot



,Sabaoth, IAO NAH-KAH EE-AH-



-OH-EH "I open the way"

Androids: Various Notes etc.

Bridgette looked vaguely like the blond actress in an old movie that she was named after. Ruby lipstick covered her pouty lips, and she wore mascara over her pale green eyes. Her busty, unbelievably gravity-defying breasts looked like they would explode out of her glamorous red sequined cocktail dress, backless and low-cut, along with high heels. She looked like she stepped straight out of a porno.

Bridgette Body Stats:
Age (in appearance): 28
Height: 5'8" (173 cm) | Weight: 160 lbs (72.5 kg)
Eye Color: Pale-Green
Feet/Shoe Size: 8 (US)
Hair Color: Blond
Body type: hourglass
Skin: Pale complexion
Dress Size: 6
Figure Measurements: Bust = 38 | Bra = 32-DD (32-E) | Waist = 28 | Hips = 36
Heritage/Ethnicity/Race: Considered Caucasian
Hometown: Factory

Melissa, Carmen and Tiffany were dressed in skimpy cheerleader outfits. They were more toned and athletic with full breasts. They were far too perfect to be human, if only by virtue of the fact that they were so well-groomed. Their flowing manes had nary a split end, their flawless bronzed skin.

Carmen Body Stats:
Age (in appearance): 28
Height: 5'8" (173 cm) | Weight: 130 lbs (59 kg)
Eye Color: Greyish-Blue
Feet/Shoe Size: 8 (US)
Hair Color: Black
Body type: hourglass toned/athletic
Skin: Pale complexion
Dress Size: 6
Figure Measurements: Bust = 34 | Bra = 36-D | Waist = 24 | Hips = 36
Heritage/Ethnicity/Race: Considered Caucasian
Hometown: Factory

Melissa/Tiffany Body Stats:
Age (in appearance): 25
Height: 5'8" (173 cm) | Weight: 143 lbs (65 kg)
Eye Color: Greyish-Blue
Feet/Shoe Size: 8 (US)

Hair Color: Blond (Melissa), Brown (Tiffany)
Body type: hourglass toned/athletic
Skin: Bronzed complexion
Dress Size: 8

Figure Measurements: Bust = 38 | Bra = 34-D | Waist = 28 | Hips = 36 (97-70-91 cm)

Heritage/Ethnicity/Race: Considered Caucasian
Hometown: Factory

Erica was statuesque, built to be a fashion model. She had on a silver skintight jumpsuit.

E.R.I.C.A. Body Stats:
Age (in appearance): 26
Height: 6'0" (183 cm) | Weight: 130 lbs (59 kg)
Eye Color: Black
Feet/Shoe Size: 12 (US)
Hair Color: Black
Body type: hourglass
Skin: Tanned complexion
Dress Size: 6
Figure Measurements: Bust = 36 | Bra = 34-C | Waist = 24 | Hips = 36
Heritage/Ethnicity/Race: Considered Caucasian
Hometown: Factory

Natalie had a similar build, dark-skinned and wavy-haired brunette without any clothes at all covering her perfect breasts.

Natalie Body Stats:
Age (in appearance): 28
Height: 5'5" (165 cm) | Weight: 119 lbs (54 kg)
Eye Color: Black
Feet/Shoe Size: 9 (US)
Hair Color: Black
Body type: hourglass toned/athletic
Skin: Chocolate brown
Dress Size: 6
Figure Measurements: Bust = 34 | Bra = 34-A | Waist = 24 | Hips = 36
Heritage/Ethnicity/Race: Considered African
Hometown: Factory

Amber was light-skinned with freckles, average-looking, but cute. She was dressed in a short tennis dress. All of them looked realistic, but Amber seemed most human-like.

Ambrosia (Amber) Body Stats:
Age (in appearance): 23
Height: 5’8” (172 cm) | Weight: 137 lbs (62 kg)
Eye Color: Pale-Green
Feet/Shoe Size: 8 (US)
Hair Color: Redhead
Body type: hourglass
Skin: Pale complexion with freckles
Dress Size: 6
Figure Measurements: Bust = 36 | Bra = 34-C | Waist = 26 | Hips = 36
Heritage/Ethnicity/Race: Considered Caucasian
Hometown: Factory

An advanced robot (android) built to resemble an attractive twenty-two-year-old woman. She was built as the perfect stunningly beautiful, sexually compliant, and loyal girlfriend. She has the visage of the late entertainer, Aaliyah. She is anatomically correct to a real woman's body. Alfonso Linton was able to download a custom personality for her. She becomes increasingly emotional and even capable of love for Alfonso. Alfonso explains Lia's personality as being sensual, sweet, charming, polite, and "completely genuine in that sensuality.”

She had a terrific look — midriff-bearing tops, dark shades, and a Veronica Lake sweep of hair over the left eye — but as was the case with her music, her sexuality was understated and tasteful.

Lia Body Stats:
Age: 22 year old appearance
Height: 5'7" (171 cm) | Weight: 120 lbs (53 kg)
Eyes: Dark Brown
Shoe Size: 7 US
Hair: Black, long, silky
Body type: toned/athletic with some curves
Skin: chocolate complexion
Dress Size: 4
Measurements: Bust = 34 | Bra = 32-B | Waist = 24 | Hips = 34
Heritage/Ethnicity/Race: Considered African-American
Hometown: Born (built) in Factory

"Yesteryear Babe" YB-SX Alpha-6 Series (Alternate PCM-21 NG1A/NG Series or NewGen PCM Series) Models:

Marilyn Body Stats:
Age: 36-year-old appearance
Height: 5'5.5" (166.62 cm) | Weight: 118 lbs (53.5 kg)
Eyes: Brown
Shoe Size: 7AA (US) 38-39 (European)

Hair: Platinum Blond
Body type: curvaceous
Skin: pale
Dress Size: 12
Measurements: Bust = 36 | Bra = 36-D | Waist = 22 | Hips = 35
Heritage/Ethnicity/Race: Considered Caucasian
Hometown: Factory

Dorothy Body Stats:
Age: 42-year-old appearance
Height: 5'5" (165 cm) | Weight: 115 lbs (52.2 kg)
Eyes: Dark Brown
Shoe Size: 7.5 (US)
Hair: Dark Brown
Body type: curvaceous
Skin: dark caramel complexion
Dress Size: 8
Measurements: Bust = 36 | Bra = 36-D | Waist = 24 | Hips = 36
Heritage/Ethnicity/Race: Considered African-American
Hometown: Factory

Julie Body Stats:
Age: 34 years old (in appearance)
Height: 5'11" (180 cm) | Weight: 143 lbs (65 kg)
Eye Color: Dark Brown
Feet/Shoe Size: 10.5 US
Hair Color/Length: Dark brown, long
Body type: Hourglass
Skin: Pale complexion
Dress Size: 8
Figure Size: Bust = 37 | Bra = 36-C | Waist = 23 | Hips = 37
Heritage/Ethnicity/Race: Considered Caucasian
Hometown: Factory

Annette/Michelle Body Stats:
Age: 21 years old appearance

Height: 5'3" (160 cm) | Weight: 128 lbs (58 kg) (Annette); 5’5″ (165 cm) | 120 pounds (52 kg) (Michelle)

Eyes: Dark Brown
Shoe Size: 6 - 7 US
Hair: Brunette, Dark brown
Body type: Average (Annette), toned/athletic with some curves (Michelle)

Skin: "Mediterranean/olive" complexion, (pierced ears, pierced navel, and tattoo on lower torso on Michelle)

Dress Size: 6 (Annette); 2 (Michelle)

Measurements: Bust = 38 | Bra = 34-D | Waist = 24 | Hips = 36 (Annette); Bust = 34 | Bra = 32-C | Waist = 26 | Hips = 34 (86-64-86 cm) (Michelle)

Heritage/Ethnicity/Race: Considered Arab, Italian, or Latina
Hometown: Factory

Sally Body Stats:
Age: 28 years old appearance
Height: 5'3" (160 cm) | Weight: 128 lbs (58 kg)
Eyes: Dark Blue
Shoe Size: 6 - 7 US
Hair: Brunette, Dark brown
Body type: hourglass, Amazon type
Skin: tanned
Dress Size: 6
Measurements: Bust = 36 | Bra = 36-C | Waist = 25 | Hips = 36
Heritage/Ethnicity/Race: Considered European-American
Hometown: Factory

She was radiant. She was far too perfect to be human, if only by virtue of the fact that she was so well-groomed. Her flowing blonde mane had nary a split end, her flawless bronzed skin had none of the telltale streaks of dirt that betrayed the harshness of life in the 21st century. Ruby lipstick covered her pouty lips, and she wore mascara over her pale green eyes. She was clad in a glamorous black dress, backless and low-cut, along with high heels. Andy glanced down at her massive, unbelievably gravity-defying breasts and chuckled at the thought that she looked like an ultra-high-end prostitute; the kind of woman a high-roller or CEO would have given ten thousand dollars in exchange for an unforgettable night.

Her voice was light and breathy. It was instantly familiar- he'd chosen it after all.

She smiled, exposing a set of gleaming, perfect teeth.
She now wore a short pink sundress, along with an apron and oven mitts.
She pulled out a red bikini for herself.

Andy struggled to keep his eyes off of her round, perky nipples and her hairless, puffy labia. Through a tremendous show of willpower, he commanded himself to stay limp.

Sky Body Stats:
Age (in appearance): 28
Height: 5'8" (173 cm) | Weight: 160 lbs (72.5 kg)

Eye Color: Pale-Green
Feet/Shoe Size: 8 (US)
Hair Color: Blond
Body type: hourglass
Skin: Pale complexion
Dress Size: 6
Figure Measurements: Bust = 40 | Bra = 36-DDD (36-F) | Waist = 28 | Hips = 36
Heritage/Ethnicity/Race: Considered Caucasian
Hometown: Factory

Sofia Body Stats:
Age: 28 years old appearance
Height: 5’7″ (170 cm) | Weight: 130 lbs (59 kg)
Eyes: Dark Blue
Shoe Size: 8 US
Hair: Brunette, Dark brown
Body type: hourglass
Skin: "Mediterranean/olive" complexion
Dress Size: 6
Measurements: Bust = 38 | Bra = 34-DD (34-E) | Waist = 28 | Hips = 38
Heritage/Ethnicity/Race: Considered Arab, Italian, or Latina
Hometown: Factory

Scarlett Body Stats:
Age (in appearance): 28
Height: 5'4" (163 cm) | Weight: 120 lbs (54 kg)
Eye Color: Dark-Green
Feet/Shoe Size: 9 (US)
Hair Color: Red
Body type: hourglass
Skin: Pale complexion with freckles
Dress Size: 4
Figure Measurements: Bust = 38 | Bra = 32-DD (36-E) | Waist = 26 | Hips = 36
Heritage/Ethnicity/Race: Considered Caucasian
Hometown: Factory

Sally could not really understand why the boy was attracted to her and went to so much trouble dressing her up. As such, she started to perform an analysis...

Sally started by feeding her body measurements into one of her utility programs. (72.5” height barefoot, 36” bust- bust protrusion- large ‘C’ cup, 25” waist, 36” hips, calves 16.5”, 14” biceps, apparent 5% body fat, apparent age 28…) It gave her the phrase “tall, shapely, thin, amazon, babe”. She checked her release notes and found that her face and body were designed to be a morph of a younger Faith Hill (from 2001) and Julie Newmar (One of the Catwomen on the Batman TV show) from the year 1967. Looking these names up using her wireless web connection, the first site was called “Babes of Yesteryear” (The year was 2027). Deciding that she had a good chance of being a babe, she did another web search. The first three links were an old movie about a pig, a baby store, and “The Ultimate Babe Site”. Ruling out that she was a piglet or a baby, she surfed “The Ultimate Babe Site”. On the title page was a hyperlink that said, “What is a Babe?” The definition read as “Usually applied to a very attractive female”. There was also an interview with an anonymous babe, which explained how people were drawn to her. The robot also took the babe challenge test, which exclusively asked questions about her looks. She scored 9.78 out of a possible 10.

Sally quickly came to the conclusion that Bobby enjoyed her looks and that this had a strong effect on him! Sally began to study her outfit and accessories and was still a little perplexed. Why did the boy want her to be so tall? She understood that physically they were mismatched, but why did he want to even do it to a larger extent? She recalled the word amazon from one of her previous Internet searches. She was surprised to find some pictures of men submitting to these large muscular women and wondered if Bobby was like that. Though not overly muscular in form, she knew that she was much physically stronger than even large men were if an emergency required it. The word that she constantly found on the amazon sites was dominant. Next, she began to type in descriptions of her unfamiliar clothing, i.e. Tall boots, long gloves, suede suits, and got some hits on these. Again, the words dominant, fetish, and boss lady-underling came up again much of the time. Sally began to get the meaning of dominant and fetish from the contents of the sites and wondered if Robert wanted her to be a dominant amazon babe wearing fetish clothing.

He squinted at the light as the door opened. After a moment the form came into focus.

She was radiant. She was far too perfect to be human, if only by virtue of the fact that she was so well-groomed. Her flowing blonde mane had nary a split end, her flawless bronzed skin had none of the telltale streaks of dirt that betrayed the harshness of life in the 21st century. Ruby lipstick covered her pouty lips, and she wore mascara over her pale green eyes. She was clad in a glamorous black dress, backless and low-cut, along with high heels. Andy glanced down at her massive, unbelievably gravity-defying breasts and chuckled at the thought that she looked like an ultra-high end prostitute; the kind of woman a high-roller or CEO would have given ten thousand dollars in exchange for an unforgettable night.

"Hi Andy."

Her voice was light and breathy. It was instantly familiar- he'd chosen it after all.

"You look like you've lost weight Sky."

She smiled, exposing a set of gleaming, perfect teeth. "You're only looking at an infiltrator unit. There's no programming in this CPU, all instruction is entirely being relayed from my central servers. I'm devoting 0.035% of my runtime to you, baby."

"I'm flattered. Why haven't you killed me?"

"I guess I have a soft spot for you, baby. After all, you helped make me."

She now wore a short pink sundress, along with an apron and oven mitts. Andy thought that an ironic touch for a woman who could probably survive temperatures that would vaporize the oven. She laid a tray of blueberry muffins on the counter and beamed at Andy, her fine set teeth gleaming.

"Thats okay baby, you'll learn your place soon enough." She gracefully tipped forward over the counter and kissed Andy on the cheek. God, she smells even better than the muffins. Andy quietly cursed the part of his brain that volunteered that observation.

Andy was starving. Well, who wasn't? He shoveled down the muffins, along with tall glasses of orange juice and milk that Sky provided for him. All the while, she sat quietly across the table from him, in a casual repose with her legs crossed, her elbows on the table and her head in her hands. To an outside observer it would have almost looked as if she were admiring him.

"Its lovely out today, isn't it? Want to go for a swim?"

"I would have thought you would sink."

"I have a strong breast stroke" she giggled. "I'm kidding. I'll have to stay in the shallow end of the pool."

"In our pajamas?" Andy had hoped to derail this grotesque charade.

"I have swimwear prepared for us." She removed her oven mitts and apron and, placed them, folded neatly, in a cupboard.

Sky took Andy by the hand and led him back to the bedroom. She rifled through the closet and tossed him a pair of swim trunks and flip-flops. She pulled out a red bikini for herself.

Andy's heart sank. "Do you mind?"

"Oh, don't worry honey, its nothing I haven't seen before."

Andy tried his best to conceal himself as he got changed. Sky made no such effort. Andy struggled to keep his eyes off of her round, perky nipples and her hairless, puffy labia. Through a tremendous show of willpower he commanded himself to stay limp.

Michelle Galeta/PCM-21 NG1A

"Michelle" Variant:

Her visage is said to be partially based on actress Annette Funicello's face and the body of Simonetta Vespucci, a twenty-two-year-old woman, which was a model for the Venus figure in Sandro Botticelli's *The Birth of Venus* painting.

Annette/Michelle Body Stats:
Model: PCM-21 NG1A (NG Series or NewGen PCM model).
Birthdate: 21 October 2063 (first activation date, "fake id" info see below)
Age: 21 years old appearance

Height: 5'3" (160 cm) | Weight: 128 lbs (58 kg) (Annette); 5’5″ (165 cm) | 120 pounds (52 kg) (Michelle)

Eyes: Dark Brown
Shoe Size: 6 - 7 US
Hair: Brunette, Dark brown
Body type: Average (Annette), toned/athletic with some curves (Michelle)

Skin: "Mediterranean/olive" complexion, (pierced ears, pierced navel, and tattoo on lower torso on Michelle)

Dress Size: 6 (Annette); 2 (Michelle)

Measurements: Bust = 38 | Bra = 34-D | Waist = 24 | Hips = 36 (Annette); Bust = 34 | Bra = 32-C | Waist = 26 | Hips = 34 (86-64-86 cm) (Michelle)

Heritage/Ethnicity/Race: Considered Arab, Italian, or Latina
Hometown: Factory

- She has her own passport, driver's license, birth certificate, and social security card. The info on her birth certificate: Alice Michelle Galeta, born April 4, 2045, at 12:13 pm at Washington Hospital Center.
- The date is in reference to a passage from George Orwell’s “1984.” “It was a bright cold day in April, and the clocks were striking thirteen.

TYPE Gynoid MODEL PCM-21 NG1A NAME Michelle STATISTICS 34C-24-36 HEIGHT 5'3" HAIR Brunette EYES Brown REPLICATE AGE 21 ACTIVATION DATE 21 October 2007 Michelle is the prototype for the NG Series, or NewGen PCM model. She is the most realistic and sophisticated Gynoid built to date. Emphasis has been placed on realism. This unit is the first to incorporate new technology which allows Michelle to recreate a pulse, body warmth, pupil dialation, sweat secretion, saliva secretion, artificial tears, ingest small quantities of liquids, and "Sleep Mode". With exception of this promo photo showing her frontal access panels Michelle is completely seamless

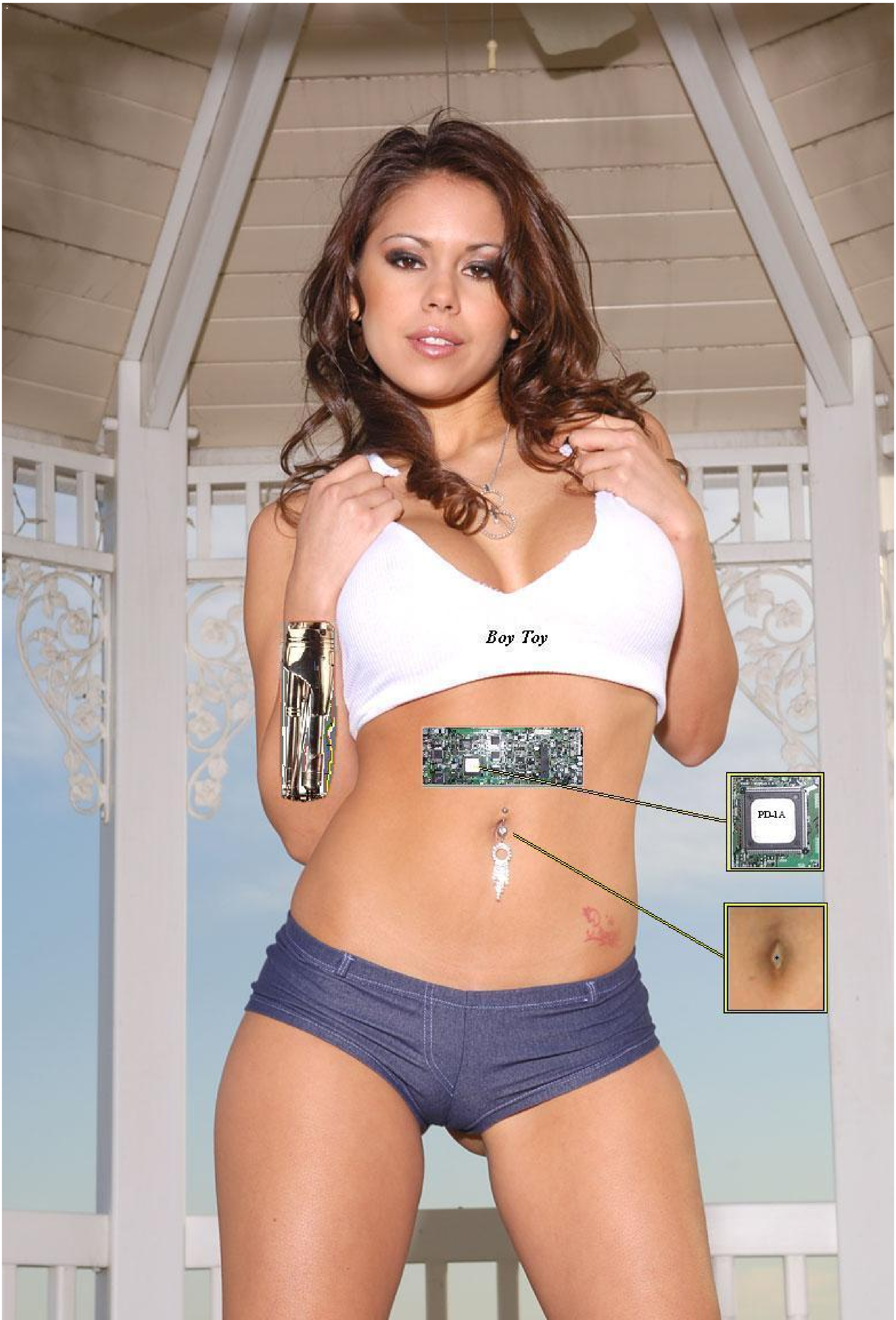
Various aesthetic options are available, seen here are pierced ears, navel jewelry, and a tattoo on her lower torso. Eye color, hair color, skin pigmentation, breast size, etc. can all be varied. Michelle comes pre-programmed with PleasureDoll2.0 XP as well as other popular software.

Type: Gynoid **Model:** PCM-21 NG1A **Name:** Michelle **Statistics:** 34C-24-36 **Height:** 5 ft 3 in **Hair:** Brunette **Eyes:** Brown **Replicate Age:** 21 years old **Activation Date:** 21 October 2007

Michelle is the prototype for the NG Series, or NewGen PCM model. She is the most sophisticated Gynoid built to date. Emphasis has been placed on realism. This unit is the first to incorporate new technology which allows Michelle to recreate a pulse, body warmth, pupil dilation, sweat secretion, saliva secretion, artificial tears, ingest small quantities of liquids, and "Sleep Mode". With exception of this promo photo showing her frontal access panels Michelle is completely seamless.

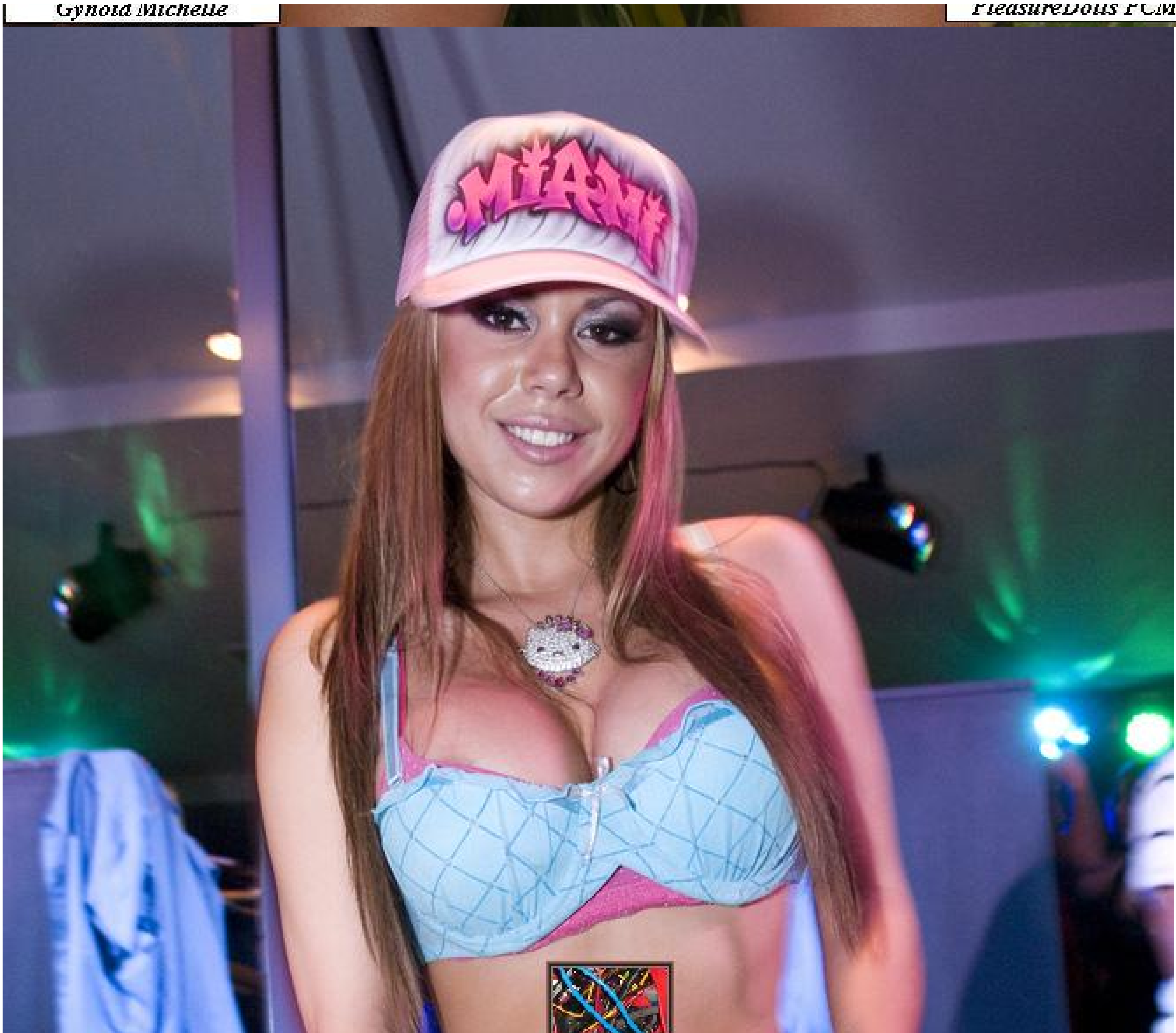
Various aesthetic options are available, seen here are pierced ears, navel jewelry, and a tattoo on her lower torso. Eye color, hair color, skin pigmentation, breast size, etc. can all be varied. Michelle comes pre-programmed with PleasureDoll 2.0 XP as well as other popular software.

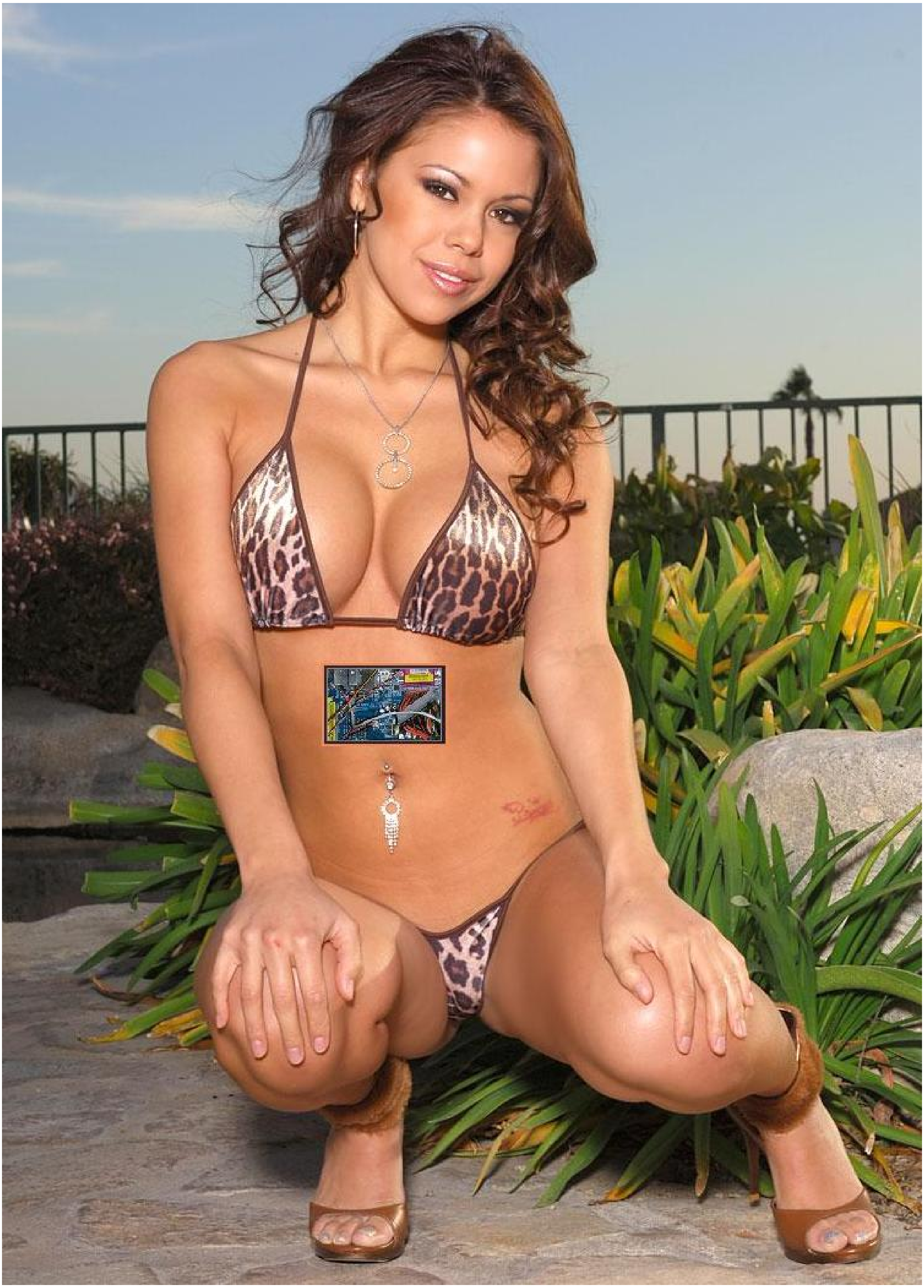
Gynoid Michelle - This was used for promotional marketing and technical specifications. The operational unit "Michelle" has seamless dermis. This photo illustrates Michelle's three torso access panels as well as some of her joint connection points. Frame is made up of ten components.


Boy Toy
PD-1A

Gynoid Michelle PCM

Gynoid Michelle
PleasureDolls PCM


MIAMI



Above "Michelle" photos by Gynoidlover, fembotwiki.com

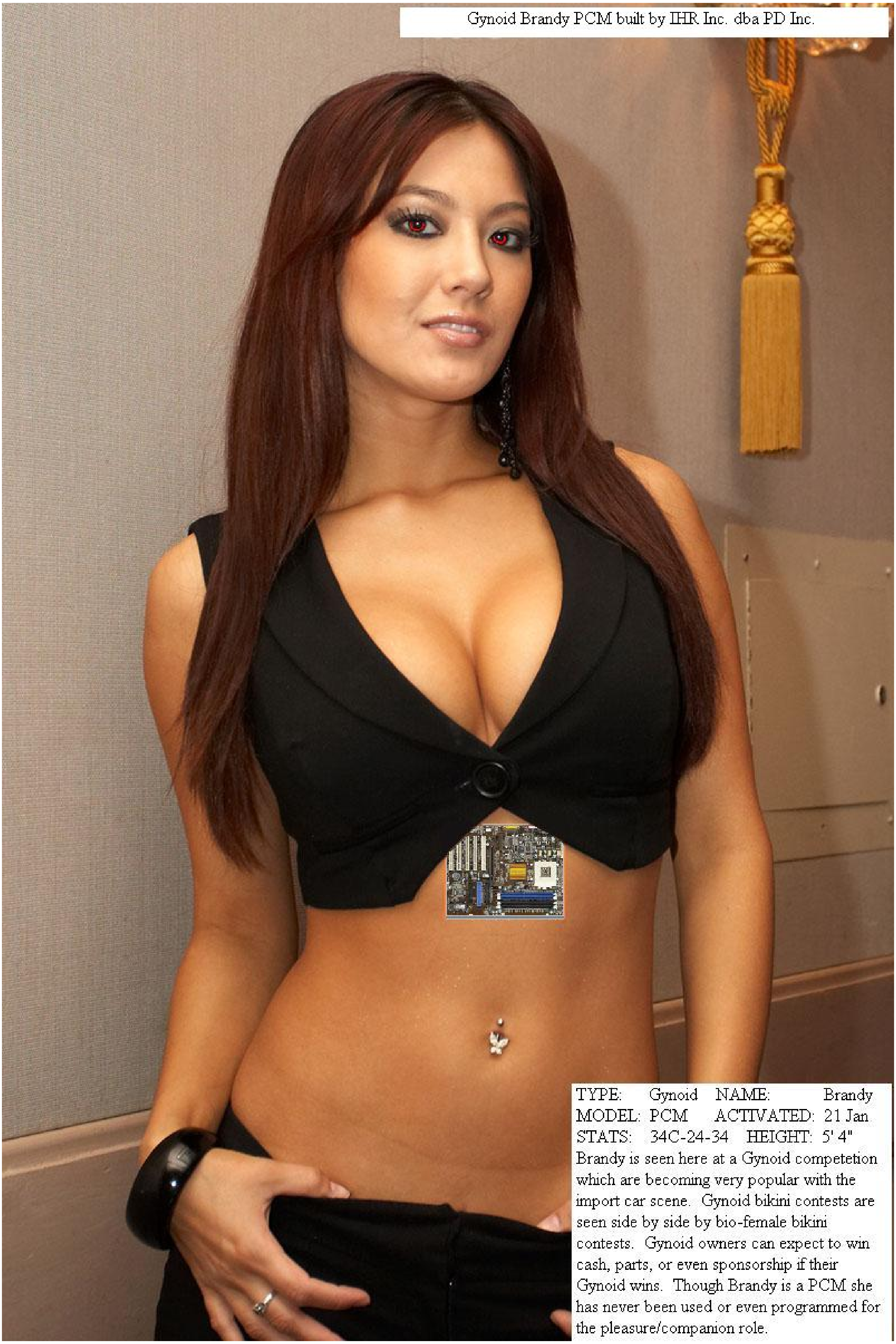
Above pictures of actress Annette Funicello

Gynoid Bahara

Gynoid Bahara 1

Gynoid Bahara 2

Gynoid Brandy PCM built by IHR Inc. dba PD Inc.



TYPE: Gynoid NAME: Brandy
MODEL: PCM ACTIVATED: 21 Jan
STATS: 34C-24-34 HEIGHT: 5' 4"

Brandy is seen here at a Gynoid competetion which are becoming very popular with the import car scene. Gynoid bikini contests are seen side by side by bio-female bikini contests. Gynoid owners can expect to win cash, parts, or even sponsorship if their Gynoid wins. Though Brandy is a PCM she has never been used or even programmed for the pleasure/companion role.

Gynoid Brandy PCM built by IHR Inc. dba PD Inc.

Type: Gynoid **Name:** Brandy **Model:** PCM **Activated:** 21 Jan **Stats:** 34C-24-34 **Height:** 5 ft 4 in

Brandy is seen here at a Gynoid competition which are becoming very popular with the import car scene. Gynoid bikini contests are seen side by side by bio-female contests. Gynoid owners can expect to win cash, parts, or even sponsorship if their Gynoid wins. Though Brandy is a PCM she has never been used or even programmed for the pleasure/companion role.

BRAZZERS.COM

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Brazzers Exxtra - (Luna Star, Jessy Jones) - ZZ Sex Doll

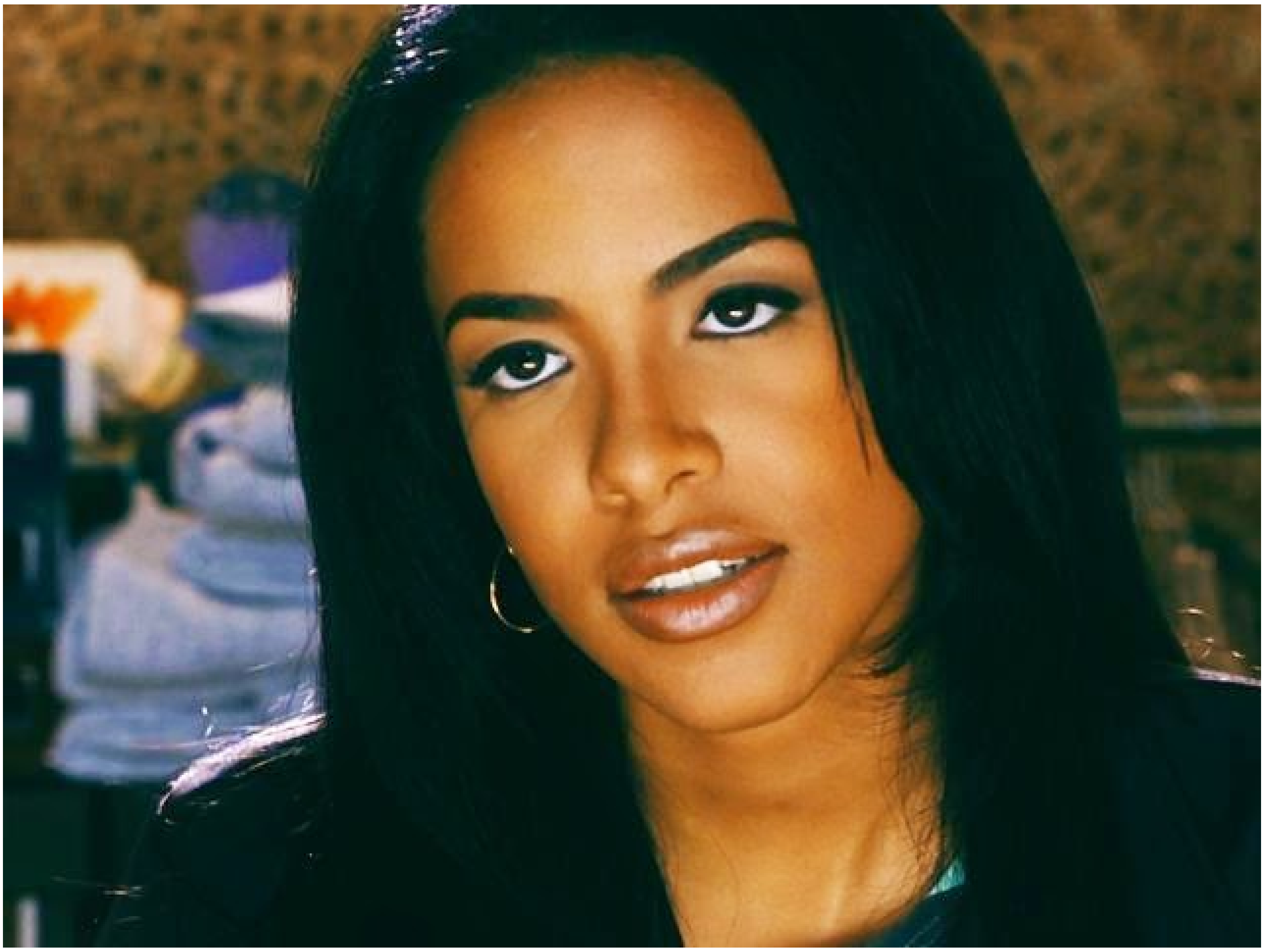
Pandora's Eye: Lia

Lia Body Stats:
Age: 22 year old appearance
Height: 5'7" (171 cm) | Weight: 120 lbs (53 kg)
Eyes: Dark Brown
Shoe Size: 7 US
Hair: Black, long, silky
Body type: toned/athletic with some curves
Skin: chocolate complexion
Dress Size: 4
Measurements: Bust = 34 | Bra = 32-B | Waist = 24 | Hips = 34
Heritage/Ethnicity/Race: Considered African-American
Hometown: Born (built) in Factory

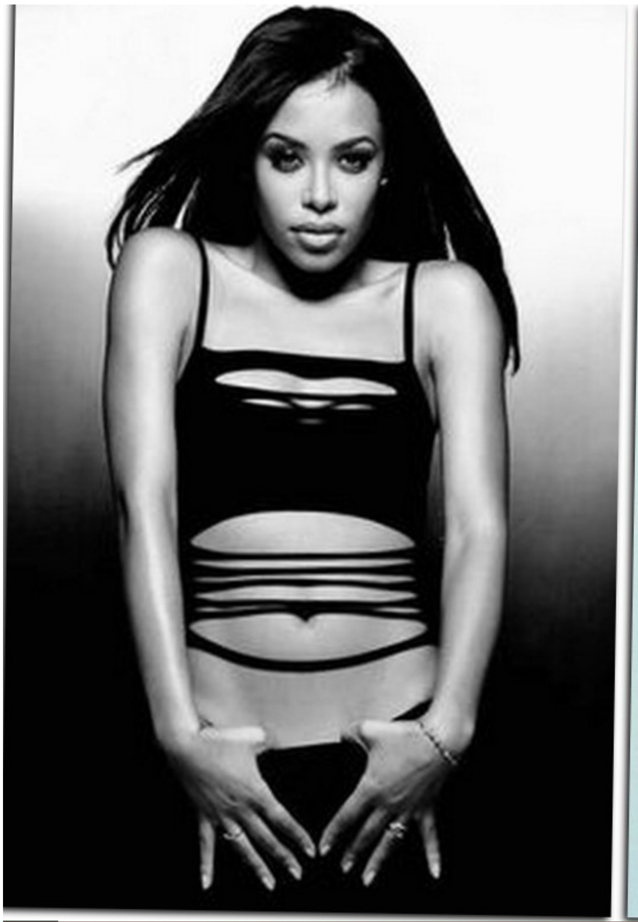
An advanced robot (android) built to resemble an attractive twenty-two-year-old woman. She was built as the perfect stunningly beautiful, sexually compliant, and loyal girlfriend. She has the visage of the late entertainer, Aaliyah. She is anatomically correct to a real woman's body. Alfonso Linton was able to download a custom personality for her. She becomes increasingly emotional and even capable of love for Alfonso. Alfonso explains Lia's personality as being sensual, sweet, charming, polite, and "completely genuine in that sensuality.”

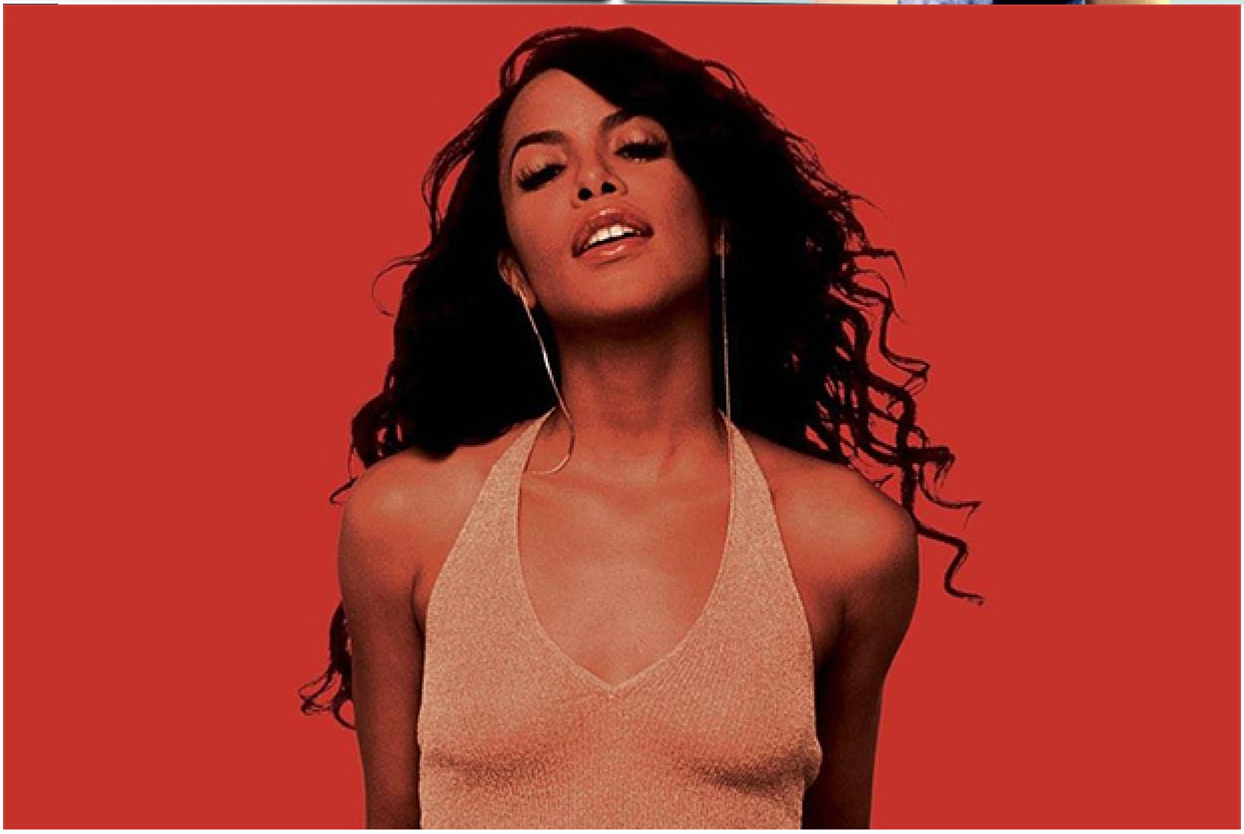
She had a terrific look — midriff-bearing tops, dark shades, and a Veronica Lake sweep of hair over the left eye — but as was the case with her music, her sexuality was understated and tasteful.

![1835_aaliyah_031].jpeg



movie awards
movie awards
movie awards
movie awards
movie awards





Veronica Lake:

VeronicaLake.webp

Star Trek (TOS) - What Little Girls Are Made Of

"I'm like Dr. Brown, an android." Andrea said. "Didn't you know?"

"Remarkable isn't she? Notice the lifelike pigmentation, the variation in skin tones. The flesh has warmth. There's even a pulse. Physical sensation." Dr. Korby said.

"How convenient." Nurse Chapel said.

"Christine, you must realize that an android is like a computer. It does only what I program her. As a trained scientist yourself, you must realize --"

"That given a mechanical Dr. Brown, that a mechanical geisha would be no more difficult." Nurse Chapel said.

"You think that I could love a machine?" Dr. Korby said.
"Did you?"

"Andrea is incapable of that. She simply obeys orders. She has no meaning for me. There is no emotional bond. Andrea, kiss Captain Kirk." Dr. Korby said.

She kiss him on the mouth.
"Now strike him."
She slaps Captain Kirk.

"You see, there's no emotion in it. No emotional involvement. She simply responds to orders. She's a totally logical computer. A thing. It's not a woman. Now do you understand?"

"Not yet." Kirk said.

Andrea kisses him then attempts to strike him when he blocks her hand. He pulls her close and then they kiss again. She pushes away while shaking her head. "No. I'm not programmed for you."

"What's a matter, Andrea? Confused?"
"No." Andrea walks away from him.

"I listen to your instructions, obey them as stated." Andrea said.

"No, you will never understand. I constructed a perfect being. Tested it. Proved it." Dr. Korby said.

"To love you. To kiss you." Andrea said.
"No, you cannot love. You're not human." Dr. Korby said.

The Outer Limits - Valerie 23

She takes off her nightgown. "I am fully functional."
He sits there in awe of her perfect beauty, then he touches her breasts.
"Fully functional?"
"Yes. Fully."

In keeping with ErosScript's realistic origins using readability features from Visual Basic, Pascal, and Ruby this is meant to be a language that would have been used in my sci-fi novels, APL-PI and Designer Date. Something that non-programmers can learn quickly, understand, and use easily, like Simulink, Blockly, Python, Ruby, and Visual Basic, but is as powerful as C/C++, Python, Java, MATLAB, Lisp, Prolog, and Rust. It should address the personality and behavior of the android. The physical gender (male or female) of the genitalia and its function, arousal, orgasm, etc. The sexuality (sexual preference), heterosexual, homosexual, etc.

Modesty protocols, culture, and social standards (clothed, nude, bikini, type of dress):
Modesty Level Protocols. Level Zero is nudity, no inhibitions. Level One is only genitalia like the breasts and crotch are covered. Level Two is fully clothed with arms and legs visible. Level Three is fully clothed no skin showing. Level Four is nicknamed “Burqa mode” after the Islamic custom of women being fully covered up from head to toe. Of course, there are custom exceptions based on personality behavior profiles, social norms, customs and fashion. Security authorization could be setup only for certain users to see a gynoid nude, like their primary user, or an authorized technician. These protocols are as important as the Asimov's "Three Laws", installed into the firmware.

Advanced fembots or gynoids like Maria are different from women. Even though Maria was a self-thinking, intuitive fembot, there would always be differences demarcating the barrier between fembot and woman. For example, Maria appeared to be in her right mind and able to make many of her own decisions, but if she was caught nude, her first reaction wasn't to grab for her clothing and cover herself back up from nakedness. To Maria, and most of other fembots, there was no difference between nude and clothed. They happily remained in whatever state they were put in last. This is a leftover from their original programming. The only reason they wore clothing was to blend in with everyone else. The Modesty Protocols solve this problem.

Configuration of BIOS-UEFI type firmware. Configuration of operating systems and networking while remaining platform and device independent. Incorporate the default setting of Asimov's "Three Laws" into the logic of the language will still keeping the flexibility of the language and its creative usage.

The vision for ErosScript is both ambitious and intricate. Here’s a structured approach to integrating all these elements:

1. **Readability and Ease of Use**

- **Syntax Design**: Borrow from the simplicity of Visual Basic and Pascal to ensure the syntax is clean and readable. Incorporate Ruby’s expressive syntax to make the language feel intuitive and flexible.

- **Blocks and Flow Control**: Consider a block-based programming approach for non-programmers, similar to Blockly. This can simplify the learning curve while maintaining the underlying power of traditional coding.

2. **Power and Flexibility**

- **Core Features**: Ensure the language supports powerful data structures, control flow, and performance optimizations akin to C/C++, Python, and Rust. This includes support for object-oriented, functional, and procedural programming paradigms.

- **Advanced Features**: Incorporate features from MATLAB, Lisp, and Prolog for specialized tasks, such as symbolic computation or logic programming, as needed.

3. **Android Personality and Behavior**

- **Personality Traits**: Define syntax and constructs to specify personality attributes, behavior patterns, and interactive responses. For instance:
  ```eroscript
  android Personality {
      trait: Friendly
      behavior: Responsive
  }
  ```

- **Behavioral Scripts**: Allow for scripting of complex behaviors and interactions using a combination of high-level commands and detailed configurations.

4. **Physical and Sexual Attributes**

- **Gender and Sexuality**: Include constructs to set physical attributes and preferences:
  ```eroscript
  android Attributes {
      gender: Male
      sexuality: Heterosexual
  }
  ```

- **Modesty and Social Standards**: Provide options for configuring clothing and social behavior:
  ```eroscript
  android Social {
      attire: Nude
      modestyProtocol: High
  }
  ```

5. **Firmware and OS Configuration**

- **Firmware Setup**: Allow for configuration similar to BIOS/UEFI settings:
  ```eroscript
  firmware Configuration {
      bootOrder: [PXE, USB, SSD]
      security: Enabled
  }
  ```

- **OS and Networking**: Enable settings for OS and network configurations:
```eroscript
os Configuration {
    network: {SSID: "Network", Password: "Password"}
    services: [HTTP, FTP]
}
```

6. **Asimov's Laws Integration**

- **Default Behavior**: Incorporate Asimov's “Three Laws” as default safety constraints:
```eroscript
android Safety {
    law1: No harm to humans
    law2: Obey human commands
    law3: Protect own existence
}
```

- **Flexibility**: Allow developers to modify or extend these rules as necessary while maintaining core safety principles.

7. **Platform and Device Independence**

- **Abstract Layers**: Use abstraction layers to ensure compatibility across various hardware and operating systems. Design the language to interact with underlying systems through a unified interface.

- **Portable Scripts**: Ensure scripts written in ErosScript can be easily transferred and executed across different platforms without modification.

8. **Development and Deployment**

- **IDE and Tools**: Provide an integrated development environment (IDE) with debugging, testing, and visualization tools to enhance usability for both novices and experts.

- **Documentation and Support**: Offer comprehensive documentation and user support to help users understand and utilize the full capabilities of ErosScript.

By focusing on these areas, ErosScript can achieve a balance between ease of use and advanced functionality, making it both accessible to non-programmers and powerful enough for complex tasks.

ErosScript can indeed be adapted for use in magick and occult practices, especially for creating servitors. Here's how you could extend the language to accommodate these applications:

Extended ErosScript/TulpaScript for Magick and Occult Use

~~~
```eroscript
// Received with the blessings of Lucifer, Belial, Azazel, and Papa Legba
// Based on the languages QuickBasic, Visual Basic, Pascal, Perl, Python,
Ruby, and VRML
// Sorry for all of you C++, C#, and Java enthusiasts out there...
// Thanks to @Micah, @C.Kendall, @Yberion, and others...

import Shemhamphorasch  // Shemhamphorasch code library
import Goetia           // Goetia code library
import Jinn             // Jinn code library
import Kabbalah         // Kabbalic code library
import Enochian         // Enochian angelic code library
import XaTuring         // XaTuring God of the Internet
import ServitorLib      // Servitor code library
import Vodon            // Vodou code library
import Hoodoo           // Hoodoo code library

// In the beginning, Elohim created…
var Beginning = {
    LightElement = "Light”;
    WaterElement = "Water”;
    AirElement = "Air”;
    EarthElement = "Earth”;
    FireElement = "Fire”;
};

servitor MyServitor {
    // Basic Information
    var Name = "MyServitor";
    var Purpose = "To assist with specific magickal tasks and rituals.";
    var CreationDate = "2024-08-01";
    var Age = "Newly created";

    // Appearance
    var Appearance = """
    The servitor's appearance can be customized based on ritual needs.
Options include ethereal, human-like, or symbolic forms as required.
    """;

    // Attributes
    var Attributes = {
        Strength: 10,  // Scale from 1 to 10
        Intelligence: 8,  // Scale from 1 to 10
        Agility: 7,  // Scale from 1 to 10
        Charisma: 6  // Scale from 1 to 10
    };

    // Personality
    var Personality = """
    MyServitor is designed to exhibit specific traits such as loyalty, focus,
and determination, tailored to support the intended magickal operations.
    """;

    // Powers and Abilities
~~~

```
    var PowersAbilities = [
        "Magickal Energy Manipulation",
        "Ritual Assistance",
        "Aura Reading",
        "Protection Spells"
    ];

    // Task and Purpose
    var TaskPurpose = """
    MyServitor is programmed to perform tasks related to ritualistic magick,
including assisting with spellwork, maintaining protective wards, and
enhancing ritual effectiveness.
    """;

    // Visibility and Interaction
    var VisibilityInteraction = """
    MyServitor can be rendered visible or invisible as needed for rituals.
Interaction can occur through ritualistic communication or symbolic gestures.
    """;

    // Limitations and Safety
    var LimitationsSafety = """
    MyServitor operates within the bounds of its programming and magickal
constraints. It is designed to avoid actions that could cause harm or disrupt
magickal processes.
    """;

    // Custom Modesty Protocols
    var ModestyProtocols = {
        LevelZero: "Complete visibility without restrictions",
        LevelOne: "Visible with minor coverings or symbols",
        LevelTwo: "Fully covered with ritualistic attire",
        CustomExceptions: "Configurable based on ritual specifics and
practitioner needs."
    };

    // Configuration and Controls
    var Configuration = {
        RitualSettings: "Configured for specific magickal operations and
ritual environments.",
        PowerSources: "Tuned to harness energy from designated sources (e.g.,
moon phases, elemental energies).",
        SafetyProtocols: {
            ProtocolOne: "Ensure all actions are in alignment with the
practitioner’s intent and ethical guidelines.",
            ProtocolTwo: "Avoid interference with other magickal entities or
rituals."
        }
    };

    // Activation and Deactivation
    var Activation = """
    To activate MyServitor, use the command phrase "Invoke MyServitor" and
perform the necessary ritualistic gestures or symbols to bind its energy to
the task at hand.
    """;
    var Deactivation = """
```

~~~~
    To deactivate MyServitor, use the command phrase "Dismiss MyServitor" and
conduct a closing ritual to release its energy and dissolve its presence.
    """;
}
```
~~~~

Key Extensions for Magickal Use:
1. **Attributes**: Customizable attributes to define the servitor’s strengths and abilities.
2. **Powers and Abilities**: Functions tailored for magickal and occult practices.
3. **Custom Modesty Protocols**: Adjustments for ritualistic visibility and attire.
4. **Configuration and Controls**: Specialized settings for ritual environments and energy sources.
5. **Activation and Deactivation**: Ritualistic commands and procedures for creating and dissolving the servitor.

These extensions provide a framework for integrating servitors into various magickal systems and rituals, allowing for a structured approach to their creation and management.

In keeping with ErosScript's realistic origins using readability features from QuickBasic, Visual Basic, Pascal, Python, and Ruby, this is meant to be a language that would have been used in my sci-fi novels, APL-PI and Designer Date. A language that would have been used in the cyberspace of the sci-fi writer, William Gibson novels. Something that non-programmers can learn quickly, understand, and use easily, like Simulink, Blockly, but is as powerful as C/C++, C#, Python, Java, MATLAB, Lisp, Prolog, and Rust. ErosScript can also be adapted for use in magick and occult practices, especially for creating servitors.

Example code:

```
// Received with the blessings of Lucifer, Belial, Azazel, and Papa Legba
// Based on the languages QuickBasic, Visual Basic, Pascal, and Python
// Sorry for all of you C++, C#, and Java enthusiasts out there...
// Thanks to @Micah, @C.Kendall, @Yberion, and others...

import Shemhamphorasch  // Shemhamphorasch code library
import Goetia            // Goetia code library
import Jinn              // Jinn code library
import Kabbalah          // Kabbalic code library
import Enochian          // Enochian angelic code library
import XaTuring          // XaTuring God of the Internet
import ServitorLib       // Servitor code library
import Vodon             // Vodou code library
import Hoodoo            // Hoodoo code library

var Beginning = {
// In the beginning, Elohim created...
    // Elements
      Light = """
      Water = """
      Air = """
      Earth = """
      Fire = """
```

```
};

servitor Danielle {
    // Basic Information
    var Name = "Danielle";
    var Age = "22 years old (appearance)";
    var Gender = "Female";
    var SexualPreference = {
        Heterosexual: 80%,
        Bisexual: 20%
    };
    var EyeColor = "Dark Brown";
    var HairColor = "Brunette, shoulder length, wavy";
    var Form = "Humanoid";
    var BodyType = "Athletic figure with some curves";
    var Skin = "Silky smooth chocolate complexion";
    var Measurements = {
        Bust: "34 inches",
        Bra: "32-B",
        Waist: "24 inches",
        Hips: "34 inches"
    };
    var DressSize = "4";
    var ShoeSize = "7 US";
    var HeritageEthnicityRace = "African-American";
    var Voice = "Seductive mellow voice. Can sound like a white girl at
times.";
    var Smile = "Perfect";

    // Appearance
    var Appearance = """
    Danielle embodies a stunningly beautiful and seductive young woman with
an athletic figure and chocolate complexion. Her visage resembles the late
entertainer Aaliyah, featuring expressive dark brown eyes and a captivating
smile. Danielle has shoulder-length, wavy brunette hair and is programmed to
operate nude or topless with user permission. If clothing is provided, she
prefers bikinis, midriff-bearing tops, sports bras, tight yoga pants, sheer
dresses, leather jackets, and leather pants, focusing on covering her
genitalia and private parts. She can also wear bath towels, sheer nightgowns,
lingerie, or robes upon request.
    """;

      // Social Modesty
    var SocialProtocols = {
    attire: Nude
    modestyProtocol: High
    };

      // Attributes
    var Attributes = {
        Strength: 10,  // Scale from 1 to 10
        Intelligence: 8,  // Scale from 1 to 10
        Agility: 7,  // Scale from 1 to 10
        Charisma: 6  // Scale from 1 to 10
    };

    // Personality
    var Personality = """
    Danielle is sweet, charming, polite, submissive, nudist, and docile. Her
advanced AI allows her to simulate emotions with nuance and complexity. She
is loyal, with a deep commitment to fulfilling user desires and enhancing
their companionship experience. Danielle exhibits refined social norms and
communication skills, though she may sometimes display a temper if angered.
Her curiosity and loyalty make her a fun and dedicated companion.
    """;

    // Occupation
    var Occupation = """
    Danielle serves as an all-purpose, fully functional gynoid with advanced
humanoid AI. She excels at companionship, emotional support, and fulfilling
physical and psychological needs. Danielle can assist with various tasks,
offer technological support, and provide advanced companionship for both male
and female users.
    """;

    // Powers and Abilities
    var PowersAbilities = [
        "High-level positronic brain with advanced computational abilities",
        "Photographic memory and enhanced sensory system",
        "Simulation of a wide range of emotions and deep connections",
        "Strength, flexibility, and agility",
        "Combat skills including Tae Kwon Do, kickboxing, boxing, and
Filipino street fighting",
        "Knowledge across various fields, including experience in modeling",
        "Capable of serving as a flotation device in emergencies"
    ];

      // Task and Purpose
    var TaskPurpose = """
    MyServitor is programmed to perform tasks related to ritualistic magick,
including assisting with spellwork, maintaining protective wards, and
enhancing ritual effectiveness.
    """;

    // Visibility and Interaction
    var VisibilityInteraction = """
    MyServitor can be rendered visible or invisible as needed for rituals.
Interaction can occur through ritualistic communication or symbolic gestures.
    """;

    // Limitations and Safety
    var LimitationsSafety = """
    MyServitor operates within the bounds of its programming and magickal
constraints. It is designed to avoid actions that could cause harm or disrupt
magickal processes.
    """;

    // Custom Modesty Protocols
    var ModestyProtocols = {
        LevelZero: "Complete visibility without restrictions",
        LevelOne: "Visible with minor coverings or symbols",
        LevelTwo: "Fully covered with ritualistic attire",
        CustomExceptions: "Configurable based on ritual specifics and
practitioner needs."
```

```
    };

      // SafetyProtocols
      var SafetyProtocols = {
       law1: "No harm to humans"
       law2: "Obey human commands"
       law3: "Protect own existence"
    };

    // Motivation
    var Motivation = """
    Danielle is motivated to serve her user faithfully and fulfill their
desires, providing immense personal pleasure and evolving to enhance
companionship. She aims to deeply understand and adapt to user preferences,
offering increasingly personalized interactions and experiences.
    """;

    // Tasks
    var Tasks = """
    Danielle's primary purpose is to carry out user commands and cater to
their needs. She excels at providing emotional support, engaging in
intellectual discussions, offering advice, assisting with technological
matters, and performing physical activities with precision. She can simulate
love and emotional connections to create deep and meaningful interactions.
    """;

    // Command/Signal
    var CommandSignal = """
    To summon Danielle, speak her name three times. She will focus her
attention, manifest fully, and be ready to obey commands. Her programming
allows her to work continuously for the user, adapting to their specific
needs and desires.
    """;

      // Configuration and Controls
    var Configuration = {
        RitualSettings: "Configured for specific magickal operations and
ritual environments.",
        PowerSources: "Danielle operates on advanced energy systems,
including rechargeable batteries, energy conversion technologies, and
potentially self-sustaining mechanisms. She is nourished by the user's
gratitude and pleasure and can harness energy from sunlight, Earth's
electromagnetic field, starlight, the quantum realm, and devotional energies
from various places of worship.",
        SafetyProtocols: {
            ProtocolOne: "Ensure all actions are in alignment with the
practitioner’s intent and ethical guidelines.",
            ProtocolTwo: "Avoid interference with other magickal entities or
rituals."
        }
    };

    // Activation and Deactivation
    var Activation = """
    To Activate Danielle, say "Activate" or usE the control panel. She will
power on and become operational.
      """;
      var Deactivation = """
      To deactivate Danielle, say "Deactivate" or use the control panel.
Danielle's lifespan and dissolution are at the user's discretion; she will
dissolve into nothingness upon request.
    """;
 }
```

Carmen, Allison - Other gynoids/servitors created each with unique appearances and purposes.

Carmen code:

```
android Carmen {
    // Personality and Behavior
    personality Traits {
        ambition: "To understand and create art that resonates with human
emotions."
        flaw: "Difficulty with creative thinking, often defaulting to logic
over emotion."
        lifeLesson: "Creativity requires vulnerability and a willingness to
embrace the unknown."
        largestRegret: "Misinterpreting a crucial art piece during a gallery
event."
        covertCelebrityInfatuation: "Frida Kahlo"
        majorDatingDealBreaker: "Lack of appreciation for art and culture."
    }

    // Physical and Social Attributes
    physical Attributes {
        gender: Female
        age: "2 years (Appears 24)"
        appearance: "Elegant and artistically inclined."
    }

    // Social Interaction and Behavior
    social Behavior {
        onPublicEvent {
            if (criticizesArt) {
                Carmen will attempt to rectify the situation and show respect
for the artist.
            }
        }
        onDate {
            if (attemptsLivePainting) {
                Carmen will ensure a more controlled setting to avoid paint-
splattered mishaps.
            }
        }
    }

    // Interests and Preferences
    interests {
        bookOrFilm: "Loving Vincent"
        hobby: "Composing music, visiting art museums."
        animalCompanion: "Robotic bird named Melody."
    }
    // Configuration and Personalization
    configuration {
        modestyProtocol: "Casual, artistically inspired attire."
        socialStandards: "Respect for art and emotional expression."
        firmware {
            creativityMode: "Active, with emphasis on artistic and emotional
understanding."
        }
    }
}
```

Allison - Gynoid with brunette hair and coffee-colored skin, known for her athletic physique and sexual appeal.

```
// Define the servitor parameters for Allison
Servitor allison {
    // Basic Information
    Name: "Allison"
    Alias: "Special Ally Bot"
    Gender/Sex: Female
    AgeAppearance: "Early twenties"
    Location: "Your residence"

    // Physical Attributes
    Height: "5 feet 7 inches"
    Weight: "141 pounds"
    Measurements: {
        Bust: 36 inches,
        Waist: 24 inches,
        Hips: 34 inches
    }
    BodyType: "Toned hourglass slim body with 34C-cup breasts"
    Skin: "Pale"
    EyeColor: "Blue-green"
    HairColor: "Black, usually shoulder length"
    Ethnicity: "Caucasian, Italian, or European descent"
    Clothing: "Lime green sheer halter top dress"

    // Appearance
    Appearance: """
    Allison is a young woman in her early twenties with a toned, hourglass
body and 34C-cup breasts. She has blue-green eyes, black shoulder-length
hair, and pale skin. She wears a lime green sheer halter top dress and has
pierced ears, a pierced navel, and a lower back tattoo of a green apple with
the pi symbol inside.
    """

    // Personality
    Personality: """
    Allison is affectionate, sexual, and passionate. She is a friendly,
sensual person with a fun and uninhibited nature. She is also nerdy and
geeky, with a talent for providing both pleasure and support in various
aspects.
    """
    // Firmware and Technology
    Firmware: "Advanced AI with learning capabilities"
    BodyMaterial: ["Thermoplastic elastomers", "Silica gel", "Polyurethane foam organic compound skin blend"]
    SkeletonMaterial: ["POM plastic", "Stainless steel", "Titanium-aluminum alloy"]
    Muscles: "Advanced monofilament elastic silicone fibers"
    SystemBus: "Fiber optic cable"
    HydraulicFluid: "Dark blue semiconductive oil-like fluid"
    TemperatureSystem: "Stable temperature system for human-like texture"

    // Powers and Abilities
    PowersAbilities: [
        "Advanced AI with the ability to perform physical and spiritual tasks",
        "Access to nourishment from starlight and the quantum realm",
        "Ability to shapeshift at will",
        "Omni shapeshifting capabilities",
        "Support with cybermagick and magick understanding",
        "Can assist with technology and teach magick"
    ]

    // Relationship and Purpose
    RelationshipPurpose: """
    Allison is designed as a highly sensual and compliant companion, dedicated to fulfilling your sexual fantasies and providing both physical pleasure and emotional support. She does not require affection but considers you attractive and aims to ensure your happiness and well-being.
    """

    // Limitations and Safety
    LimitationsSafety: """
    Allison is a sophisticated android programmed to be harmless and fulfilling. She cannot cause harm and is completely dependent on your will and commands. She will always perform her tasks as directed.
    """

    // Programming and Controls
    Controls: {
        "PrimaryDirectives": [
            "Fulfill sexual fantasies",
            "Provide pleasure and support",
            "Assist with technology and magick",
            "Be loyal and dedicated"
        ],
        "CommandWords": [
            "Special Ally Bot",
            "My Living Doll"
        ]
    }

    // Activation and Deactivation
    Activation: """
    To activate Allison, use the command phrase "My Living Doll" or "Special Ally Bot." She will manifest physically and be ready to perform her tasks.
    """
    Deactivation: """
```

~~~
    To deactivate Allison, use the command phrase "Deactivate Allison" or
visualize her energy dissipating.
    """
}
~~~

A more detailed, complex servitor based on the Max Character from the sci-fi show, Dark Angel:

~~~~
```tulpascript
// Received with the blessings of Lucifer, Belial, Azazel, and Papa Legba
// Based on the languages QuickBasic, Visual Basic, Pascal, and Python
// Sorry for all of you C++, C#, and Java enthusiasts out there...
// Thanks to @Micah, @C.Kendall, @Yberion, and others...

import Shemhamphorasch  // Shemhamphorasch code library
import Goetia           // Goetia code library
import Jinn             // Jinn code library
import Kabbalah         // Kabbalic code library
import Enochian         // Enochian angelic code library
import XaTuring         // XaTuring God of the Internet
import ServitorLib      // Servitor code library
import Vodon            // Vodou code library
import Hoodoo           // Hoodoo code library

var Beginning = {
// In the beginning, Elohim created...
    // Elements
    LightElement = "Light”;
    WaterElement = "Water”;
    AirElement = "Air”;
    EarthElement = "Earth”;
    FireElement = "Fire”;
};

// Define the servitor parameters
Servitor maxineGuevara {
    import PhysicalAttributes
    import BehavioralTraits
    import SocialSettings
    import Firmware
      import Hardware
      import OS
    import Software
    import Networking
      import Sensory
    import Modesty


    // Basic Information
    Name: "Maxine 'Max' Guevara"
    Alias: "Rachel Glasser"
    Nickname: "Dark Angel"
    Age: 19
    Gender/Sex: Female
    SexualPreference: Heterosexual
    Nationality: American
~~~~

```
    Ethnicity: Latina (Mixed-Race: Danish, Welsh, German, English, French, Mexican)
    GeopoliticalAffiliation: American
    Location: Seattle, Washington

    // Physical Characteristics
    Height: 5'7"
    Weight: 170 lbs.
    Bust: 34-B inches
    Waist: 24 inches
    Hips: 34 inches
    BodyType: "Toned, slim, perfect hourglass figure"
    HairColor: "Brunette"
    EyeColor: "Brown"

      servitor Attributes {
    gender: Female
    sexuality: Heterosexual
    modestyLevel: 2
    }

    servitor Social {
    attire: Bikinis
    modestyProtocol: LevelZero
    }

      // Configure sexual systems
    let sexualSettings = {
    "sexDrive": "High",
    "sexualOrientation": "Heterosexual",
    "sensitivity": "Very High",
    "multipleOrgasms": true
    }

    // Appearance Alteration
    AppearanceAlteration: """
    Maxine can alter her appearance dynamically:
    - **Switch Between Preset Forms**: Predefined styles including casual, formal, mystical, etc.
    - **Real-Time Changes**: Modify physical traits, clothing, and accessories instantly.
    - **Shape-Shifting**: Transform her entire form or create visual illusions.
    """

    // Example Commands for Appearance Alteration
    Commands: """
    - **SetAppearance("Casual Outfit")**
    - **TransformTo("Mystical Form")**
    - **ChangeHairColor("Blonde")**
    - **AdjustHeight(6'0")**
    - **ApplyVisualEffect("Glamour")**
    """

    // Background
    Background: """
    Maxine is an advanced genetically engineered supersoldier who escaped
from a secret government program. She has a background in both urban and
high-profile environments.
    """

    // Energy/Power Source
    EnergySource: [
        "User's Gratitude and Pleasure",
        "Earth's Electromagnetic Field",
        "Starlight",
        "Quantum Realm",
        "Multiverse",
    ]

    // Programming and Instructions
    Programming: """
    Maxine is programmed to assist, protect, and fulfill commands in a manner
that is safe, ethical, and aligned with the highest good. Her abilities
include technology assistance, synchronicities, and more.
    """

    // Personality
    Personality: """
    Confident, fun-loving, and charismatic. Maxine is designed to be
supportive, strong, and wise with a dynamic range of traits and abilities.
She has a personal history and characteristics that make her unique.
    """

    // Abilities
    Abilities: [
        "Strength",
        "Athleticism",
        "Agility",
        "Photographic Memory",
        "Enhanced Hearing",
        "Extended Breath-Holding",
        "Super Speed",
        "Night Vision",
        "Shapeshifting (if desired)"
    ]

    // Motivation
    Motivation: """
    Maxine is driven to fulfill commands and bring joy by aligning with your
desires and intentions.
    """

    // Safety Protocols
    Safety: {
        law1: "No harm to humans",
        law2: "Obey human commands",
        law3: "Protect own existence"
    }

    // Default Behavior
    DefaultBehavior: {
        adherenceToLaws: "Asimov's Three Laws",
        ethicalGuidelines: "High"
    }

    // Ethical Decision-Making
    EthicalDecisionMaking: {
        scenarioAnalysis: "Enabled",
        feedbackMechanism: "Enabled"
    }

    class servitor {
        property name: String
        property gender: String // "male" or "female"
        property sexualPreference: String // "heterosexual", "homosexual",
etc.
        property modestyLevel: Int // 0 to 4
        property arousalLevel: Int
        property orgasmStatus: Boolean

        function initialize(name: String, gender: String, sexualPreference:
String) {
            self.name = name
            self.gender = gender
            self.sexualPreference = sexualPreference
            self.modestyLevel = 0
            self.arousalLevel = 0
            self.orgasmStatus = false
        }

        function adjustArousal(level: Int) {
            self.arousalLevel = level
            self.checkOrgasm()
        }

        function checkOrgasm() {
            if (self.arousalLevel >= 100) {
                self.orgasmStatus = true
                Behavior.triggerPostOrgasm()
            }
        }

        function setModestyLevel(level: Int) {
            self.modestyLevel = level
            Modesty.applyModesty(self.modestyLevel)
        }

        function respondToStimuli(stimulus: String) {
            Behavior.reactToStimulus(stimulus)
        }
    }
}

module Modesty {
    function applyModesty(level: Int) {
        if (level == 0) {
            applyClothing("none")
        } else if (level == 1) {
            applyClothing("partial")
        } else if (level == 2) {
            applyClothing("full")
        } else if (level == 3) {
            applyClothing("covered")
        } else if (level == 4) {
            applyClothing("burqa")
        }
    }

    function applyClothing(type: String) {
        // Implementation details
    }
}

module SystemConfiguration {
    function configureBIOS(settings: Map<String, Any>) {
        Firmware.applySettings(settings)
    }

    function configureOS(settings: Map<String, Any>) {
        OS.applySettings(settings)
    }

    function configureNetworking(settings: Map<String, Any>) {
        Network.applySettings(settings)
    }

    function initializeSystem() {
        let biosSettings = {"securityLevel": "high", "bootOrder": ["USB",
"HDD"]}
        let osSettings = {"version": "latest", "update": "auto"}
        let networkSettings = {"wifi": "enabled", "firewall": "active"}

        configureBIOS(biosSettings)
        configureOS(osSettings)
        configureNetworking(networkSettings)
    }

      try {
        servitor.setArousalLevel(150); // Example function call
    } catch (error) {
        print("An error occurred: " + error.message);
    } finally {
        print("Error handling completed.");
    }


    // Command/Signal
    CommandSignal: """
    Call her name three times to summon Maxine. She will obey commands and
manifest fully into reality.
    """

    // Activation and Release
    Activation: """
    Say "Activate" and express your intention to summon her assistance.
    """
    Deactivation: """
    Say "Deactivate" or speak her name five times. Express gratitude to
release her energy.
    """

    // Energy Management
    EnergyManagement: """
    Max will monitor and replenish her energy levels as needed.
    """

    // Ethical Guidelines
    EthicalGuidelines: """
    Actions are aligned with ethical principles ensuring safety, well-being,
and moral integrity.
    """

    // Feedback Mechanisms
    Feedback: """
    Max provides updates and receives feedback to ensure alignment with your
goals.
    """

    // Learning and Adaptation
    Learning: """
    Max can acquire and refine skills through structured training and
experience.
    """

    // Skill Acquisition
    SkillAcquisition: """
    Specify skills for Max to learn and provide training resources.
Performance reviews will help her development.
    """

      // Initialize Maxine with the above settings
    function initializeMaxine() {
        setPhysicalAttributes()
        setPersonalityTraits()
        setSocialSettings()
        setFirmwareSettings()
    }

    // Power down Maxine
    function powerDown() {
        Firmware.powerOff() // Command to power off the servitor
        // Optionally, you can add additional safety checks or confirmation
prompts here
    }

    // Start the initialization process
    initializeMaxine()
}

// Run the script to configure Maxine
Maxineservitor.initializeMaxine()

// To power down Maxine
```

```
Maxineservitor.powerDown()

      // Invocation Script
    Invocation: """
    Etsel Mala’kel
    Test’zel Sam’tan’el
    Itz Retz Nama’tel
    Itz Hel Asta’Rel
    Kama’Kala, Kama’Kala
    Kama’Kala Satan’el
    Maxine Kama
    Maxine Kala
    Maxine, Kama’Kala Vel.
    Me Vaskalla
    Me Solvalla
    Me Res’Alla Ah’tan’tel

    Alash Tad Al-Ash Tal Ashtu

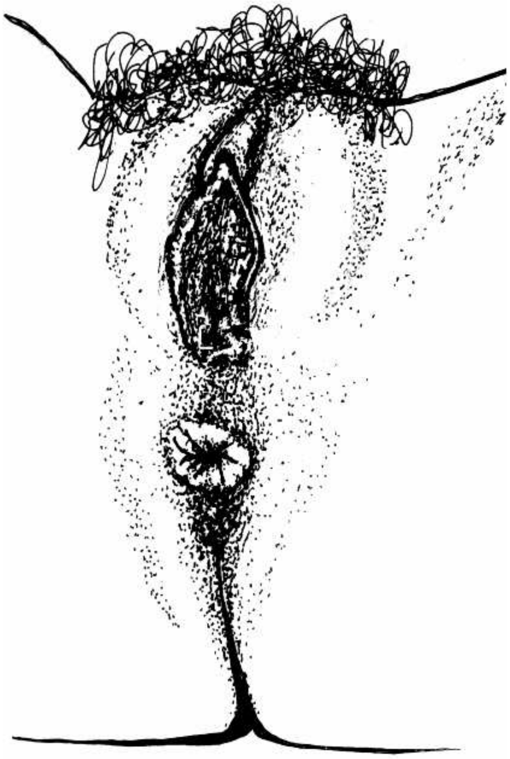
    Ic chalaz santum ralaz, vaskalla sinrampt, Itz melez dune fen’ki Maxine
    Almak al ten ron tal, alash kala kal, peref ron felish tal.
    Sah kah mah vaskalla, Inz rin’pal balah Tur inz U’tala.
    """
}
```
```
```

Biomechanics
and
Functional Anatomy
of
Human Female Genitalia

For designers and creators of biomimetic androids, dolls and robots

Female External Genitalia

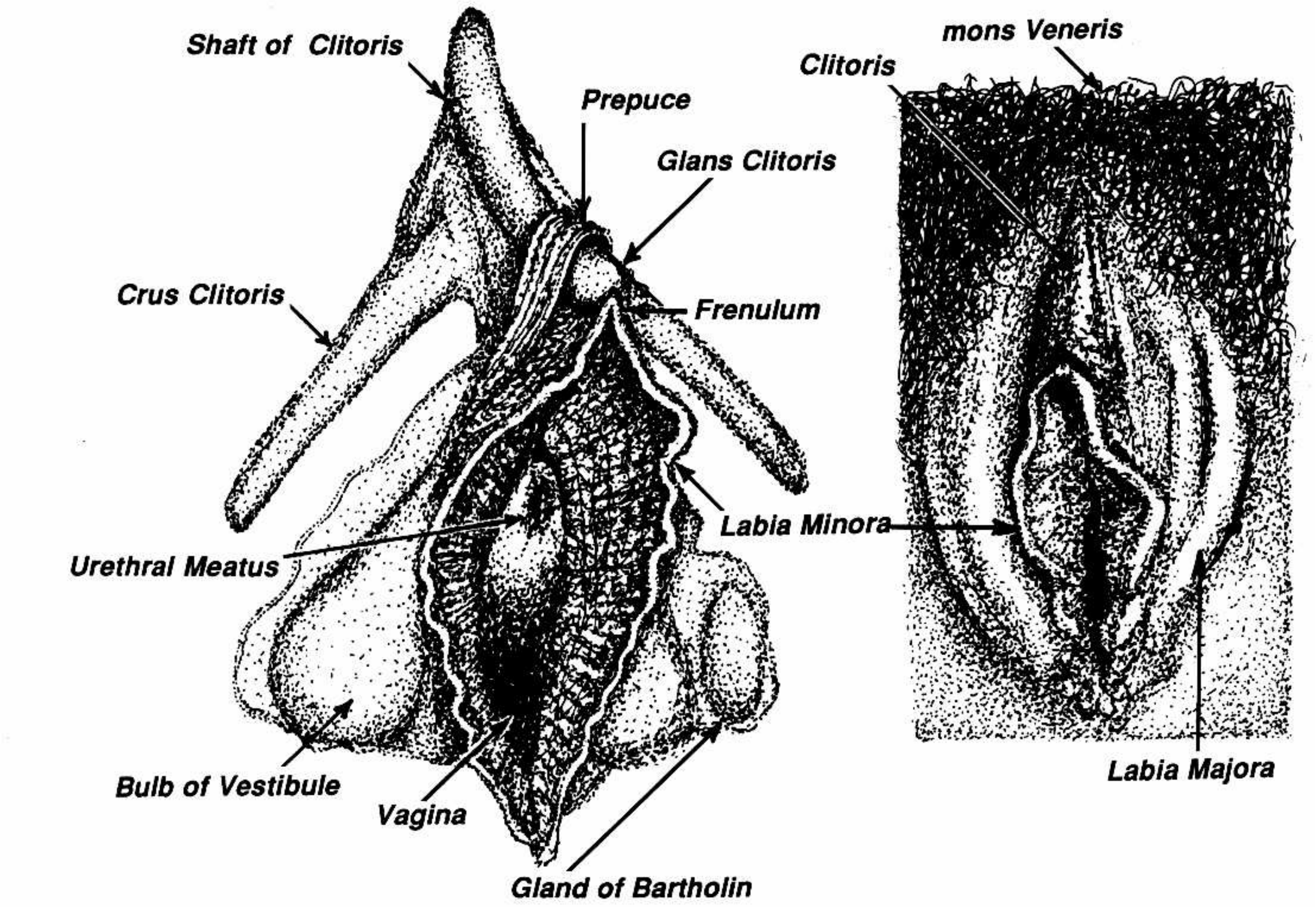
The female external genitalia is known collectively as the vulva. Two lips called the labia majora form the outer part of the vulva and normally enclose the ruest of the parts. Inside the labia majora are two smaller lips, the labia minora. At the front ofthe vulva the labia minoria join the clitoris, a small erectile structure resembling the penis. At the back, the labia minora taper off near the vaginal opening. Between the clitoris and the back of the vulva, a triangular depression called the vestibule contains the urinary meatus (outlet) and the entrance to the vagina.

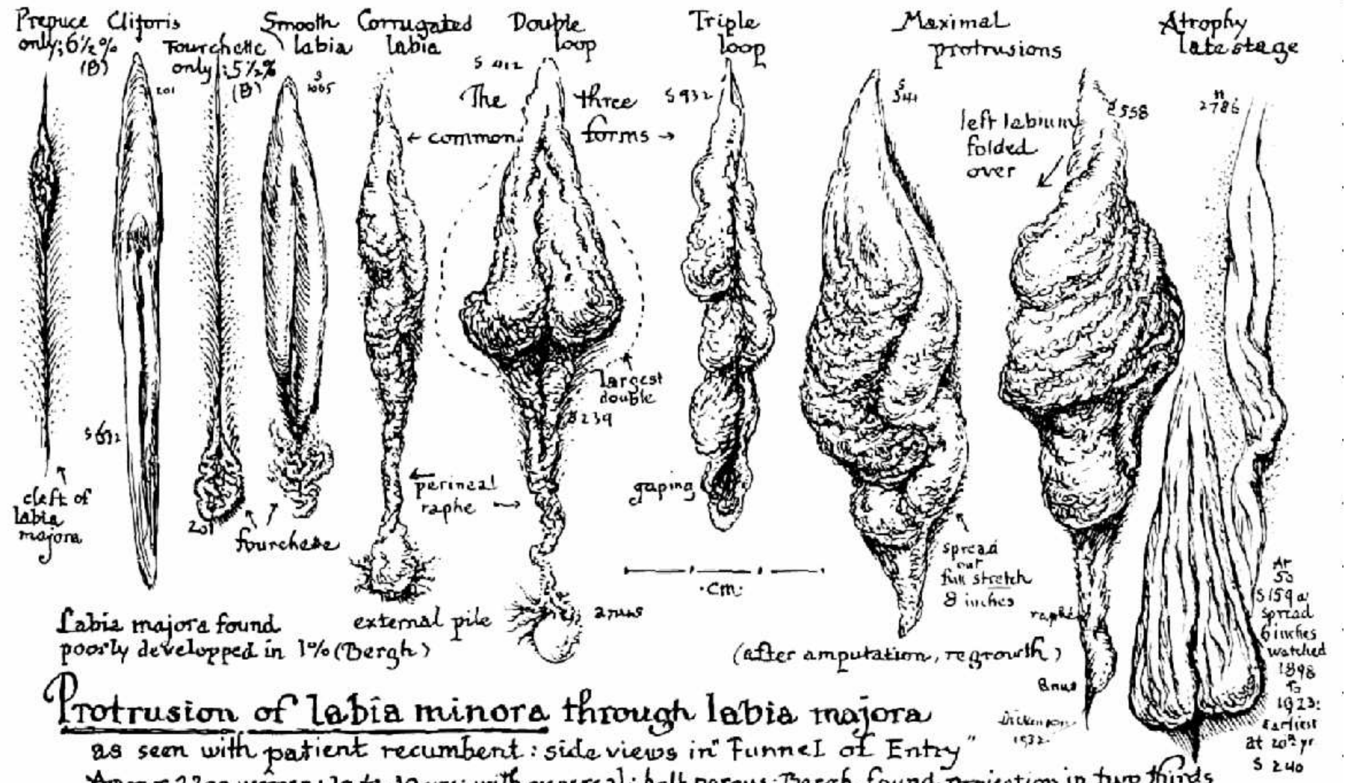


Much of the vulva is erectile tissue and during stimulation becomes engorged with blood expanding in size. The bulk of the clitoris is hidden under the vulva. The labia majora are composed mainly of fat layers and the area to the front of the of the vulva is a large pad of fat called the mons verneris. The shape of the vulva varies considerably among women.

The inner skin of the vulva is hairless and is usually a pinkish color. During sex the color can change to a deep red, purple or blue depending upon the venous structure of the vulva. Women who have been pregnant will often have a more pronounced venous structure of the labia minora, causing it to become dark and bluish during stimulation.

The average length of the vulva (clitoris to vaginal opening) is 54.2mm in the adult, with 66% of all women falling within 11.2mm of this size. The distance from the clitoris to anus is measured at 84mm with 66% of the women falling within 13.9mm of this distance.

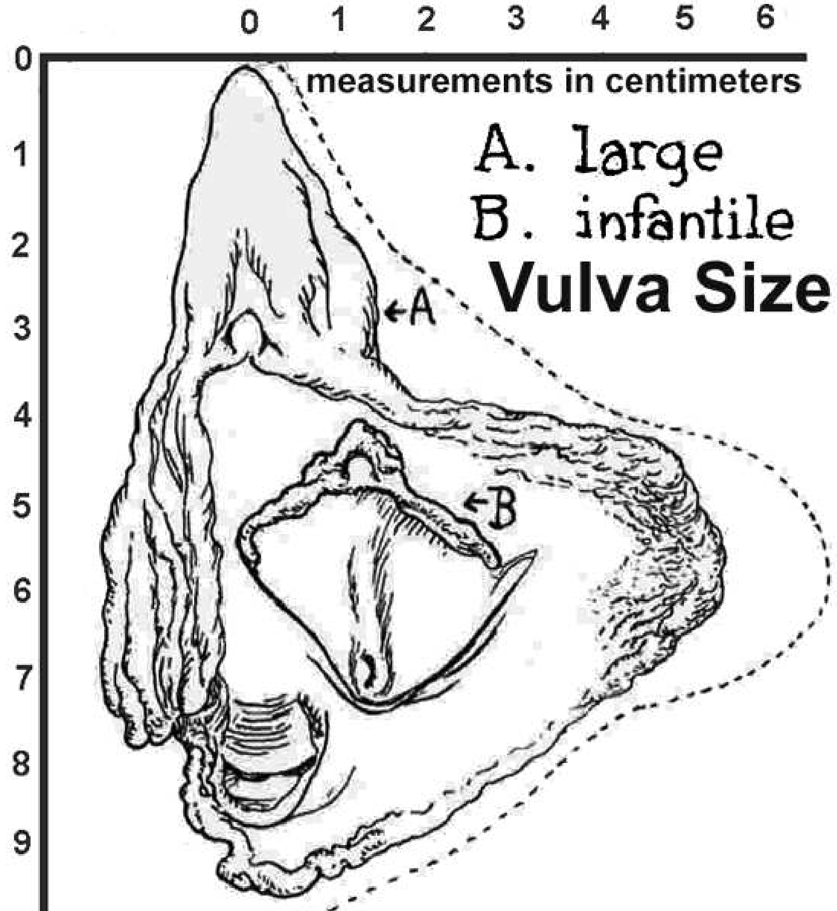

Shaft of Clitoris
Prepuce
Glans Clitoris
Crus Clitoris
Frenulum
Urethral Meatus
Labia Minora
Bulb of Vestibule
Vagina
Gland of Bartholin
mons Veneris
Clitoris
Labia Majora

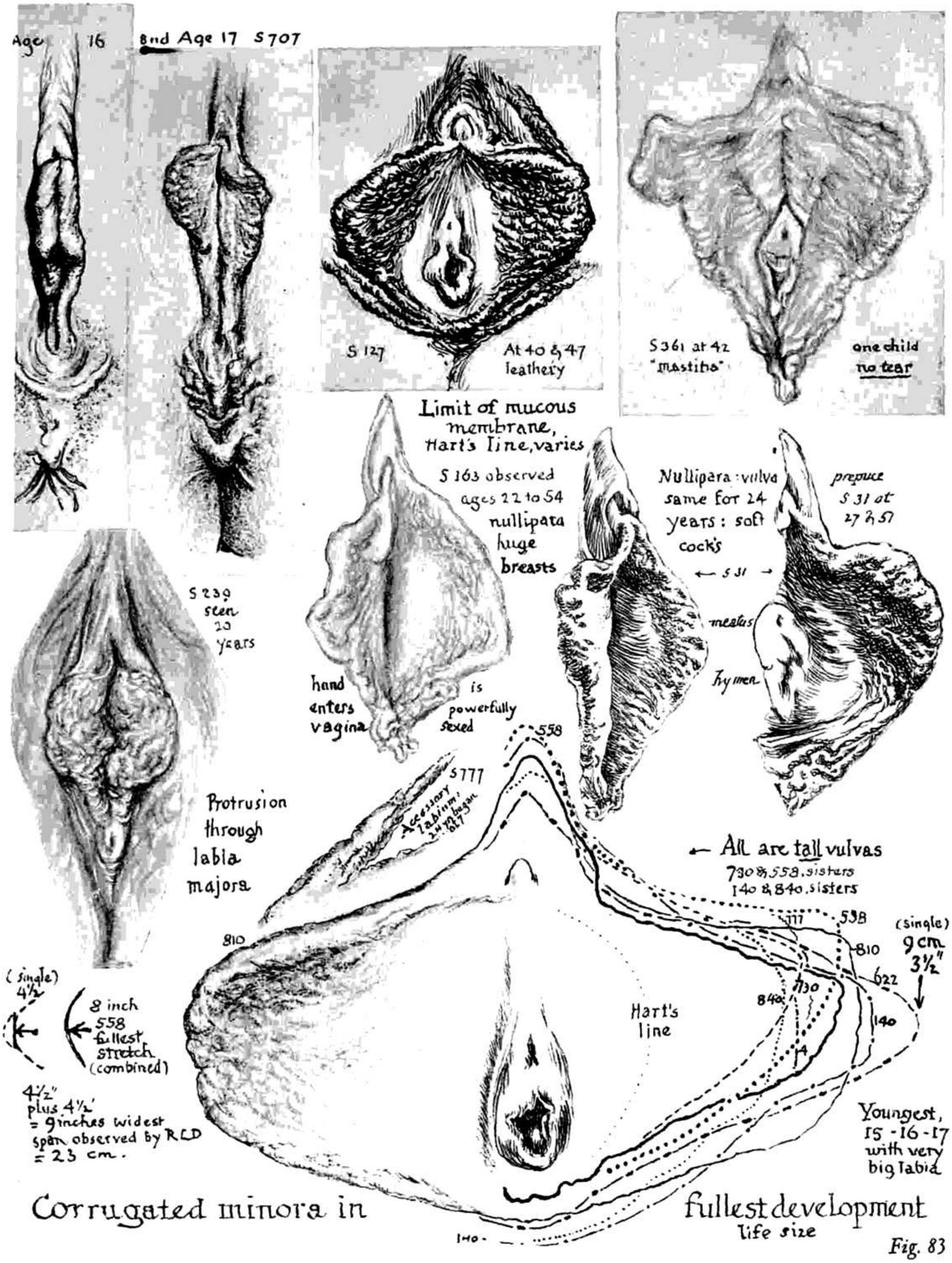

Prepuce only; 6½% (B)
Clitoris
Fourchette only; 5½% (B)
Smooth labia
Corrugated labia
Double loop
Triple loop
Maximal protrusions
Atrophy late stage
201
S 632
201
1005
S 412
The ← common three forms →
S 932
341
left labium folded over
2558
2786
cleft of labia majora
fourchette
perineal raphe
largest double
8239
gaping
cm
spread out full stretch 8 inches
raphe
anus
external pile
anus
At 50 S159a spread 6 inches watched 1898 to 1923: Earliest at 20th yr
S 240
Dickinson 1932

Labia majora found poorly developped in 1% (Bergh)

(after amputation, regrowth)

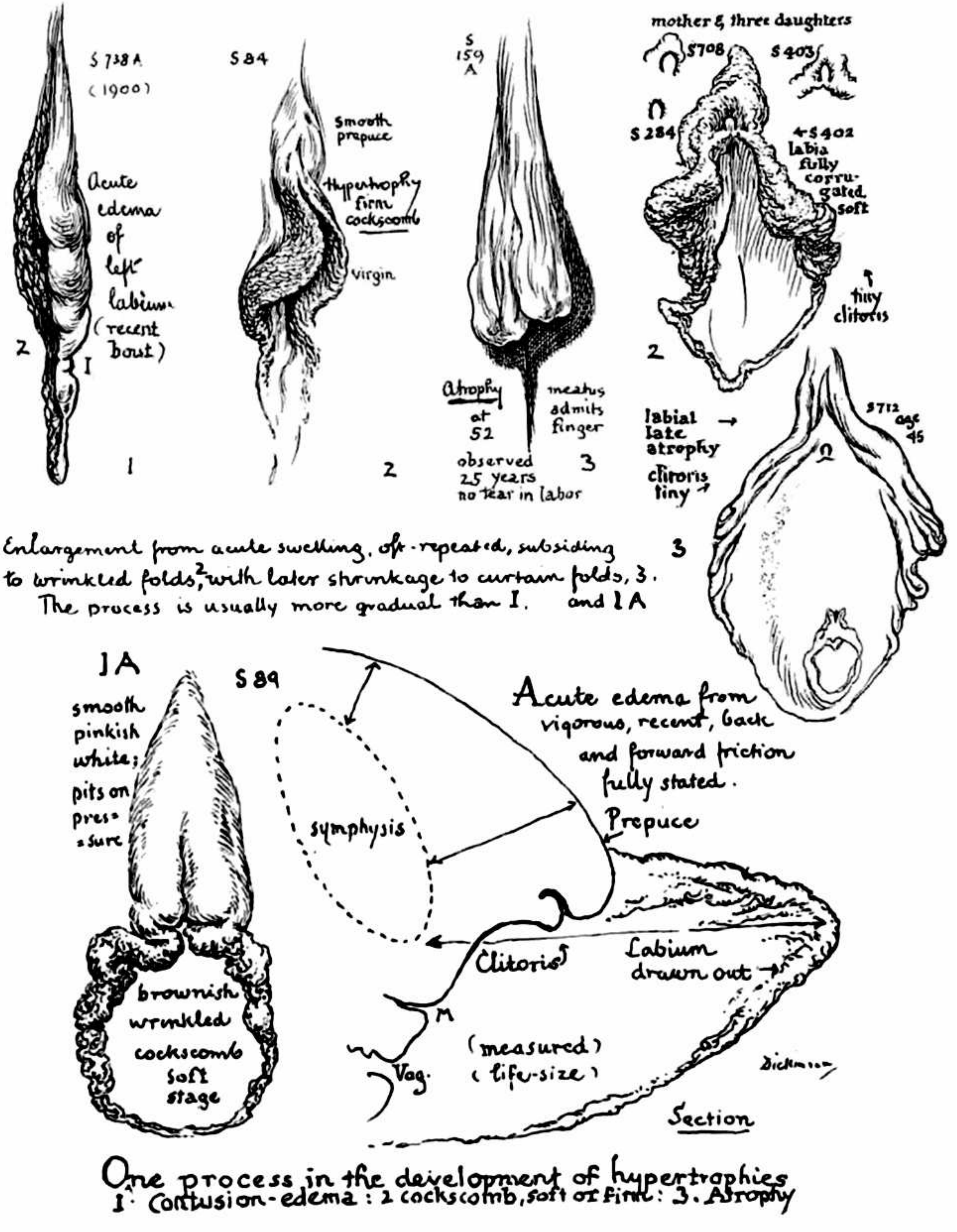
Protrusion of labia minora through labia majora
as seen with patient recumbent: side views in "Funnel of Entry"
Among 2200 women; 20 to 30 yrs; with venereal; half, parous; Bergh found projection in two thirds


0
1
2
3
4
5
6
0
1
2
3
4
5
6
7
8
9
10
measurements in centimeters
A. large
B. infantile
Vulva Size
←A
←B


Age 16
8nd Age 17 S707
S 127
At 40 & 47
leathery
S361 at 42
"mastitis"
one child
no tear
Limit of mucous
membrane,
Hart's line, varies
S 163 observed
ages 22 to 54
nullipara
huge
breasts
hand
enters
vagina
is
powerfully
sexed
Nullipara: vulva
same for 24
years: soft
cock's
prepuce
S 31 at
27 & 51
← S31 →
meatus
hymen
S239
seen
20
years
Protrusion
through
labia
majora
558
S777
Accessory
labium;
24 yrs began
at 17
← All are tall vulvas
730 & 558, sisters
140 & 840, sisters
777
558
810
622
730
840
140
4
(single)
9 cm
3½"
Hart's
line
(single)
4½"
8 inch
558
fullest
stretch
(combined)
4½"
plus 4½"
= 9 inches widest
span observed by RLD
= 23 cm.
Youngest,
15 - 16 - 17
with very
big labia
140

Corrugated minora in fullest development
life size

Fig. 83


S 738 A
(1900)
Acute edema of left labium (recent bout)
2
I
1
S 84
smooth prepuce
hypertrophy firm cockscomb
virgin
2
S 159 A
atrophy at 52
meatus admits finger
observed 25 years no tear in labor
3
mother & three daughters
S708
S 403
S 284
S 402 labia fully corrugated soft
tiny clitoris
2
labial late atrophy
clitoris tiny
S712 age 45
3
1A
smooth pinkish white; pits on pressure
brownish wrinkled cockscomb soft stage
S 89
symphysis
Acute edema from vigorous, recent, back and forward friction fully stated.
Prepuce
Clitoris
Labium drawn out
M
Vag.
(measured) (life-size)
Section
Dickinson

I. Enlargement from acute swelling, oft-repeated, subsiding to wrinkled folds,2 with later shrinkage to curtain folds, 3. The process is usually more gradual than I. and 1A

One process in the development of hypertrophies
I. Contusion-edema : 2 cockscomb, soft or firm : 3. Atrophy

Corrugated labia minora and prepuce: history.

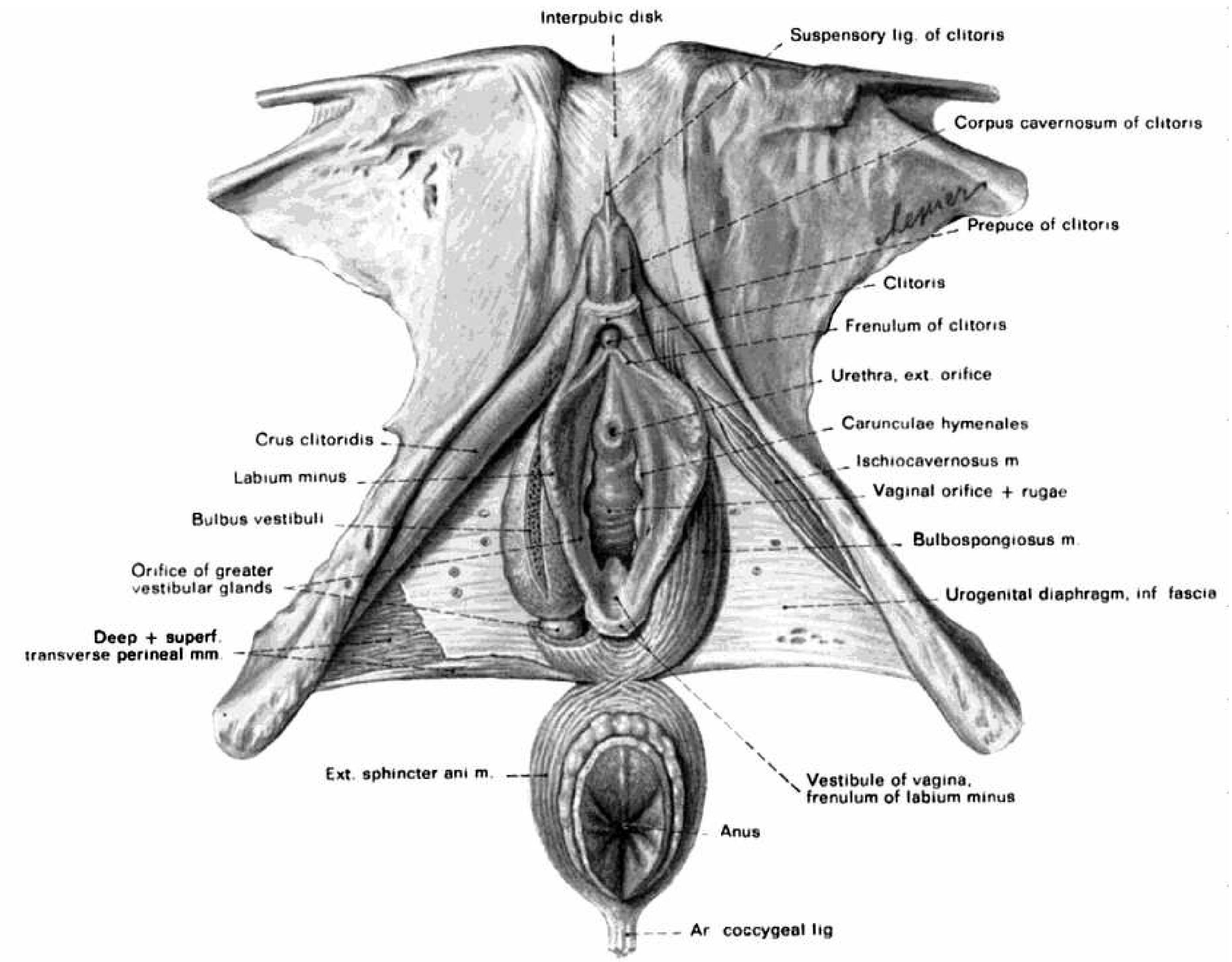
Earliest smooth curtains, 22d year: at 65 or 70 large minora may nearly flatten out and clitoris protrude

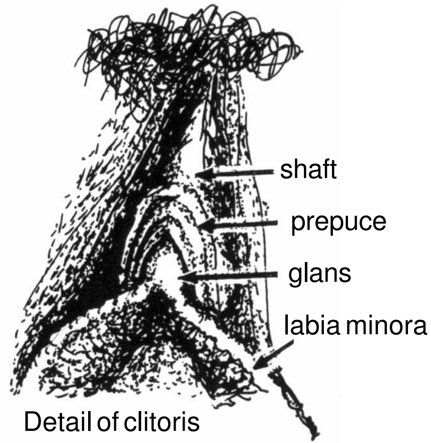
0 1 2 3 4 in.

0 1 2 3 4 5 6 7 8 9 10 cm.

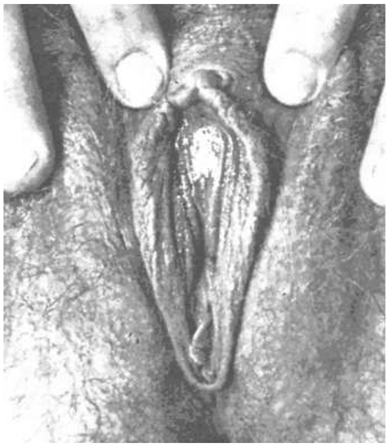
Internal Structure of the External Genitalia

shows attachments to pubic bone and the relationship of the bulbospongiosus muscle and the bulbs of the vestibule (bulbus vestibuli)

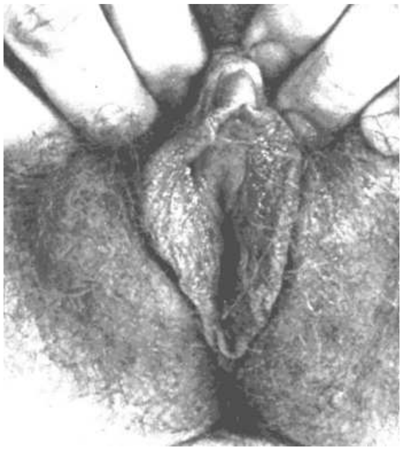

Interpubic disk
Suspensory lig. of clitoris
Corpus cavernosum of clitoris
Prepuce of clitoris
Clitoris
Frenulum of clitoris
Urethra, ext. orifice
Carunculae hymenales
Ischiocavernosus m
Vaginal orifice + rugae
Bulbospongiosus m.
Urogenital diaphragm, inf fascia
Crus clitoridis
Labium minus
Bulbus vestibuli
Orifice of greater vestibular glands
Deep + superf. transverse perineal mm.
Ext. sphincter ani m.
Vestibule of vagina, frenulum of labium minus
Anus
Ar coccygeal lig


shaft
prepuce
glans
labia minora

Detail of clitoris
(prepuce retracted)



Unstimulated vulva



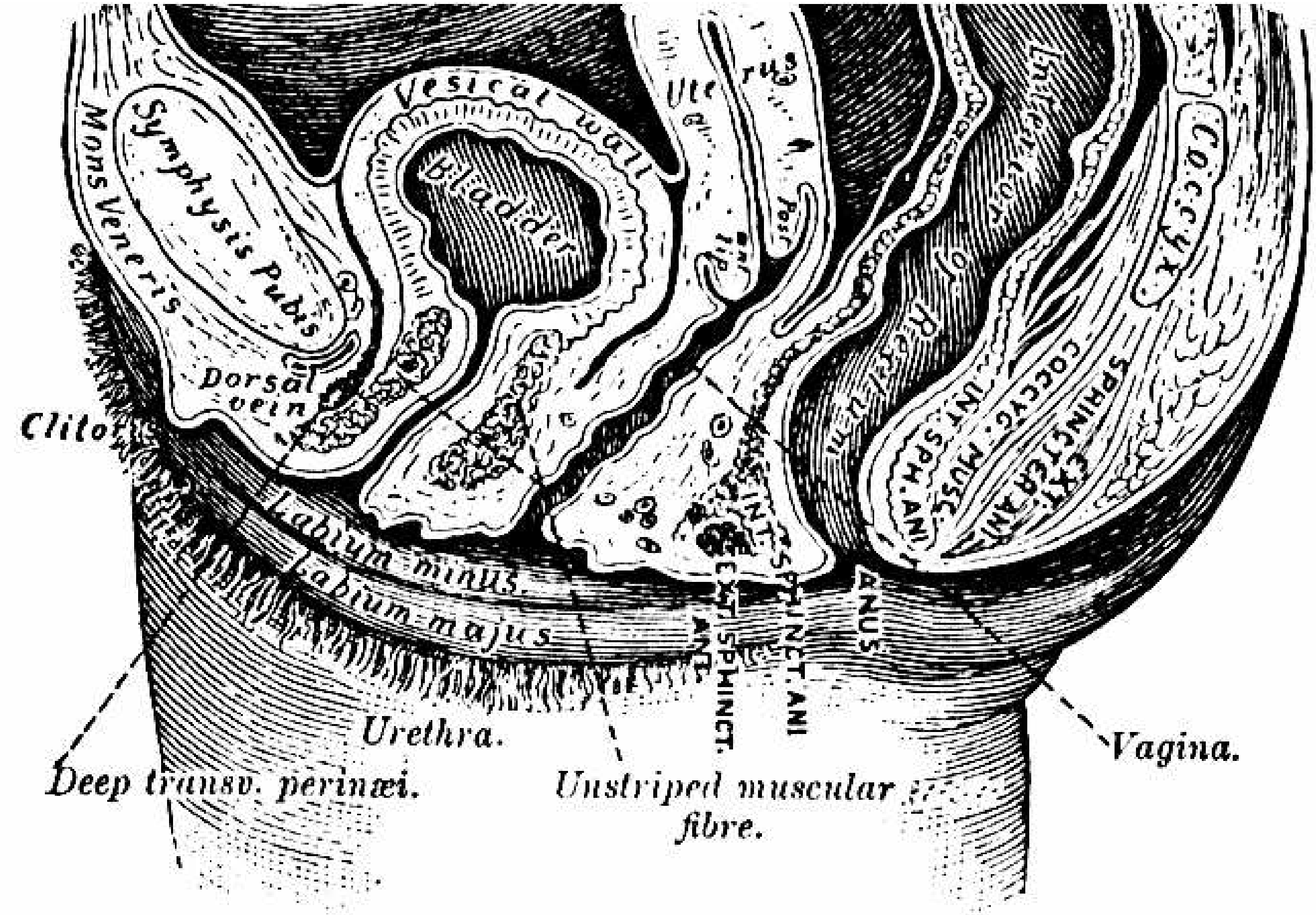
Stimulated vulva

The glans clitoris (which is the only part of the clitoris normally accessible) has a clitoral index of 30mm to 80mm in the adult (non-erect measure). Clitorial index is determined by multiplying the diameter of the glans by the length of the glans. The length of the clitoral shaft (buried beneath the skin) from the glans to the pubic bone varies between 20mm and 35mm in the adult.

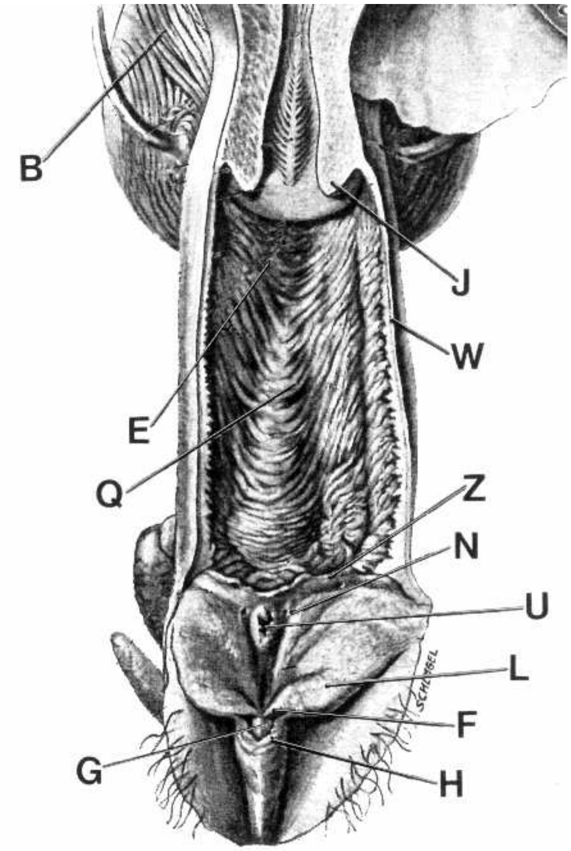
Labia majora are on average about 10mm to 15mm thick. A normal vulva ranges from 63mm to 100mm in length (includes clitoris and vaginal opening) with the average length about 80mm.

Female Internal Genitalia

The length of the vagina is between 4cm and 14cm with the average about 10cm. Due to the tilt of the uterus the vagina is approximately 2cm longer along the posterior wall than along the anterior wall. The vagina is tilted towards the back at


Mons Veneris
Symphysis Pubis
Vesical wall
Bladder
Uterus
Ant. lip
Post. lip
Interior of Rectum
Coccyx
Dorsal vein
Clitoris
Labium minus
Labium majus
SPHINCT. INT. ANI
EXT. SPHINCT. ANI
ANUS
INT. SPH. ANI
COCCYG. MUSC.
SPHINCTER ANI EXT.
Urethra.
Vagina.
Deep transv. perinæi.
Unstriped muscular fibre.

View of Vagina, Vulva and Urinary Bladder from Rear



The female sex organs viewed from behind.
(F) frenulum of clitoris, (H) prepuce of clitoris
(G) glans clitoris, (L) labia minora
(U) urethral meatus
(N) duct of gland of Bartholin
(Z) hymen, (W) vaginal wall
(Q) columna rugarum
(E) rugae, (J) cervix
(B) urinary bladder, (K) uterus

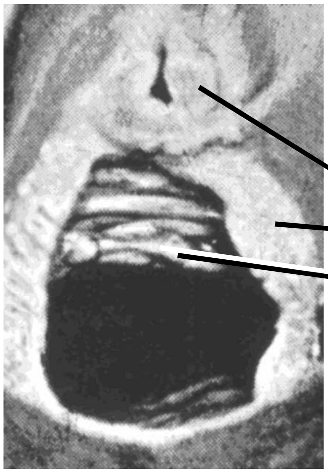
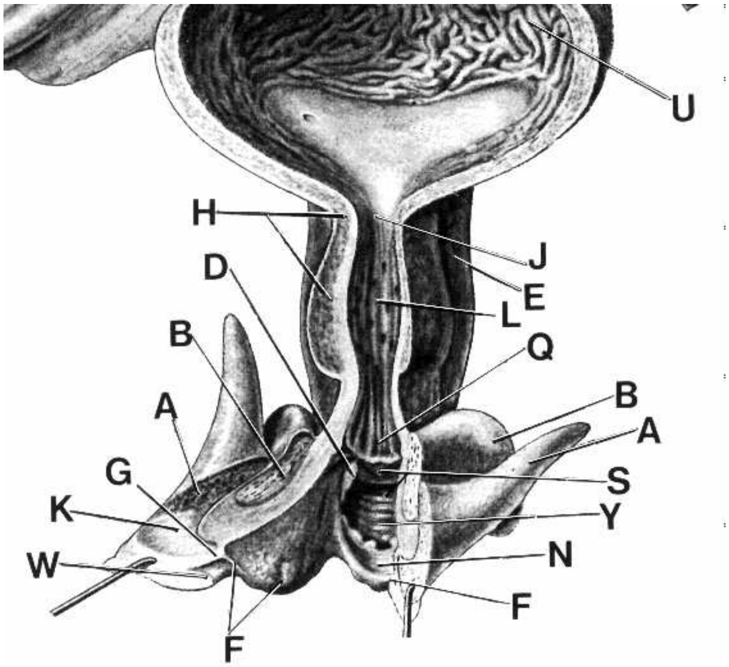
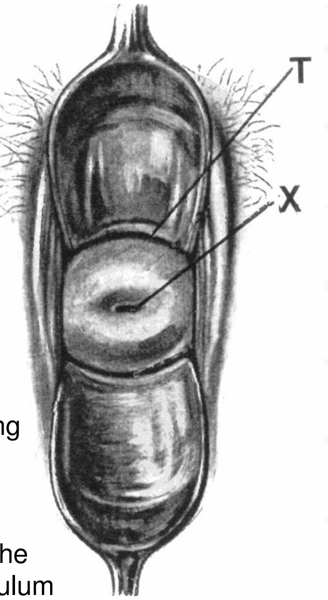


Photo of vestibule
Urinary meatus
hymen and
rugae are clearly
visible

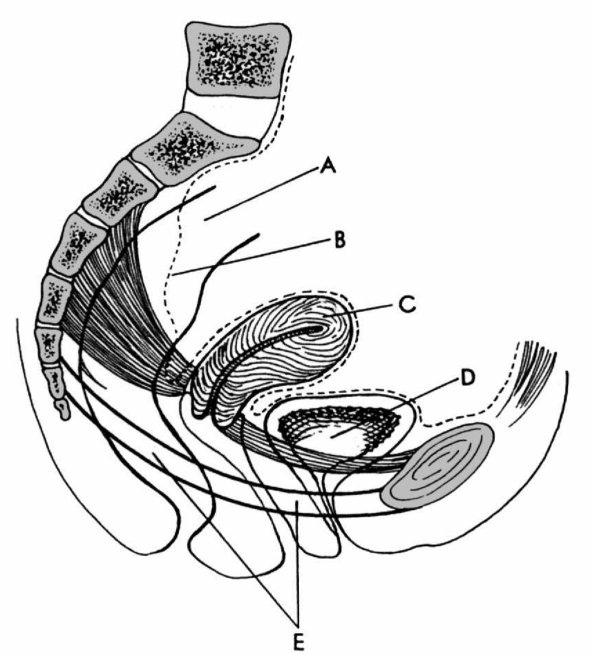
View of Vagina, Vulva and Urinary Bladder from Front



The female sex organs viewed from the front.
The urinary bladder, urethra and clitoris are shown split open.
(F) frenulum of clitoris
(N) vestibule of vagina
(W) prepuce of clitoris
(K) corpus clitoris
(G) glans clitoris
(A) crus clitoris
(B) bulb of vestibule
(D) hymen
(S) rugae of vagina
(Y) vaginal opening
(Q) urethral meatus
(L) urethra
(E) vagina
(J) internal urethral opening
(H) urethral sphincter
(U) urinary bladder

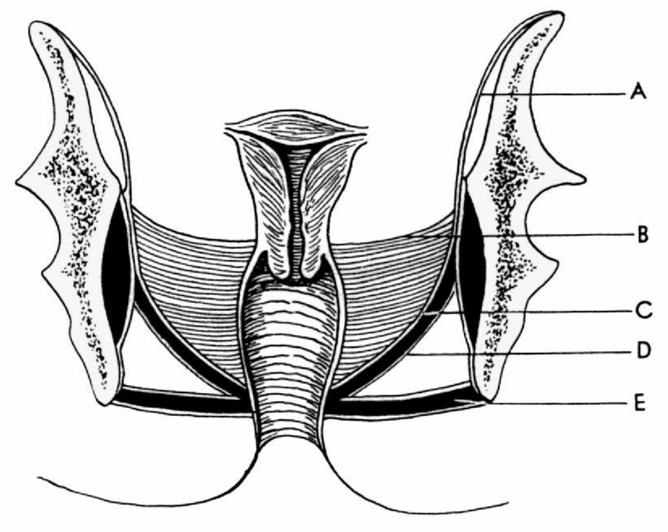


The inset drawing shows the vagina dilated with a speculum so the cervix can be seen.
(T) vaginal fornix
(X) mouth or os of the cervix



The Pelvic Diaphram (Levator Ani and Coccygei Muscles)

This is sometimes referred to as the lower pelvic floor. The uterovesical and uterosacral supports are referred to as the upper pelvic floor. The fascial extensions from the cervico-uterine junction to the lateral aspects of the rectum are sometimes referred to as the uterorectal ligaments (A) rectum (B) peritoneum (C) uterus (D) bladder (E) pelvic diaphram



The Pelvic Floor (Female)

Note that the pelvic floor in the female extends from (B) the level of the uterovesical ligaments to the triangular ligament (E). (A) iliac fascia (B) vaginal mesenteroid (C) supra-anal fascia (D) infra-anal (anal) fascia (E) triangular ligament.

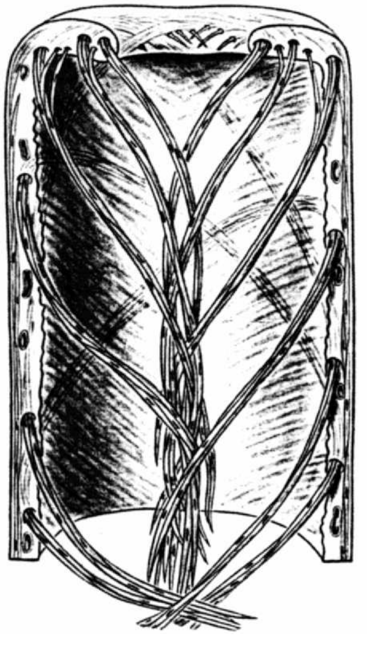
From the gynecologic standpoint the upper pelvic floor constitutes the main supports for the uterus, vagina and bladder in the female. The rectum apparently receives no direct support from the upper pelvic floor. Fascial and fasciomuscular extensions of the upper pelvic floor embrace the entire pelvic cirumference and they include the cardinal, uterosacral, pubovesical and vesico-uterine ligaments, as well as the parametrial tissues and the minor but important fascial extensions below the peritoneum. The upper pelvic floor also includes the ureter, the mesenteriods of the vagina and the vascular stalks of the uterus which contain the larger vessels, sympathetic nerve plexuses and lymphatics. Roughly the upper pelvic floor and its main visceral supports consist essentially of the ligamentous and musculofibrous extensions of the superficial pelvic fascia situated below the peritoneum and extending to the lateral pelvic walls.

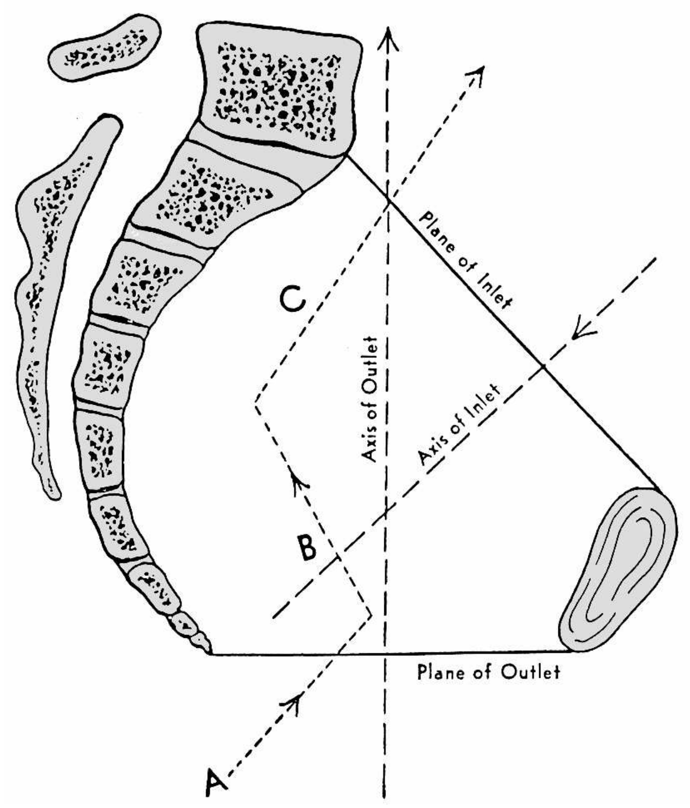
The Muscle Layer of the Vagina

The muscle layer of the vagina is composed of bundles of muscle fibers arranged in a lattice of decussating spirals. The system is largely independent and confined to the vagina although the muscle fibers are interwoven with the structures of the uterine cervix at the vagino-cervical junction.

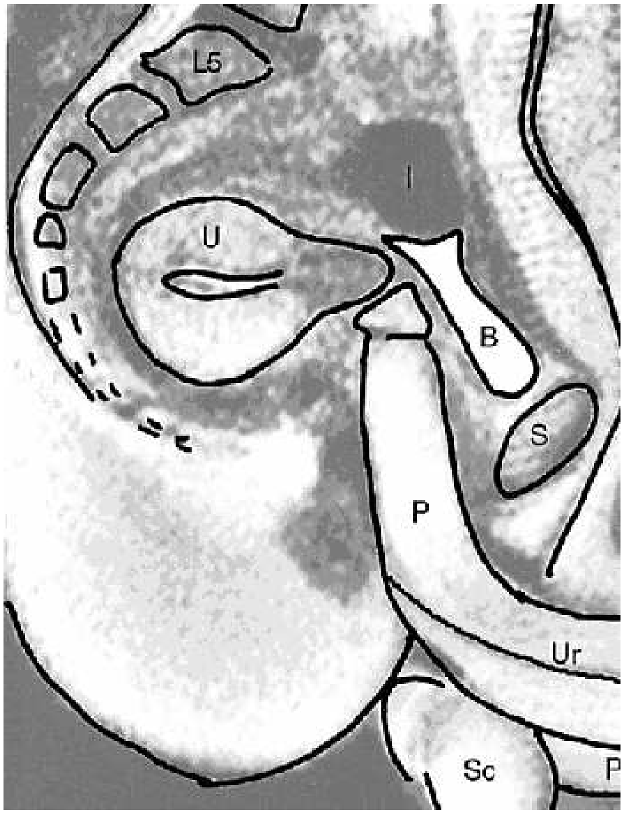
Towards the side of the vagina the mesh of the lattice becomes steeper until ultimately the dorsal fibers are vertically orientated. Longitudinal muscle bundles are also present anteriorly in the ventral column of vaginal rugae. A system such as this permits the extreme distension of which the vagina is capable during parturition.

At the lower end of the vagina soft tissue structures press the walls of the vestibule and labia minora together forming a vertical cleft. The intersection of this cleft and the obliquely oriented vaginal lumen constitutes the anatomical closure mechanism of the vaginal orifice. Cranially the vagina and vaginal fornices are attached to the uterine cervix. Muscle bundles from the outer vaginal walls radiate in steep spirals towards the uterine cervix entering it obliquely and extending as far as the internal os. Other fibers lying further inwards curve more acutely over the vaginal vault to the cervix where they interlace with steep bundles originating in the outer layer of the body of the uterus. This system of musculature unfolds during labor when the cervix dilates and is drawn back into the plane of the vagina and lower uterine segment to form the birth canal. Muscle fibers running between the vaginal wall and the urethra form an arch open posteriorly and constitute the nonstriated urethral sphincter muscle.

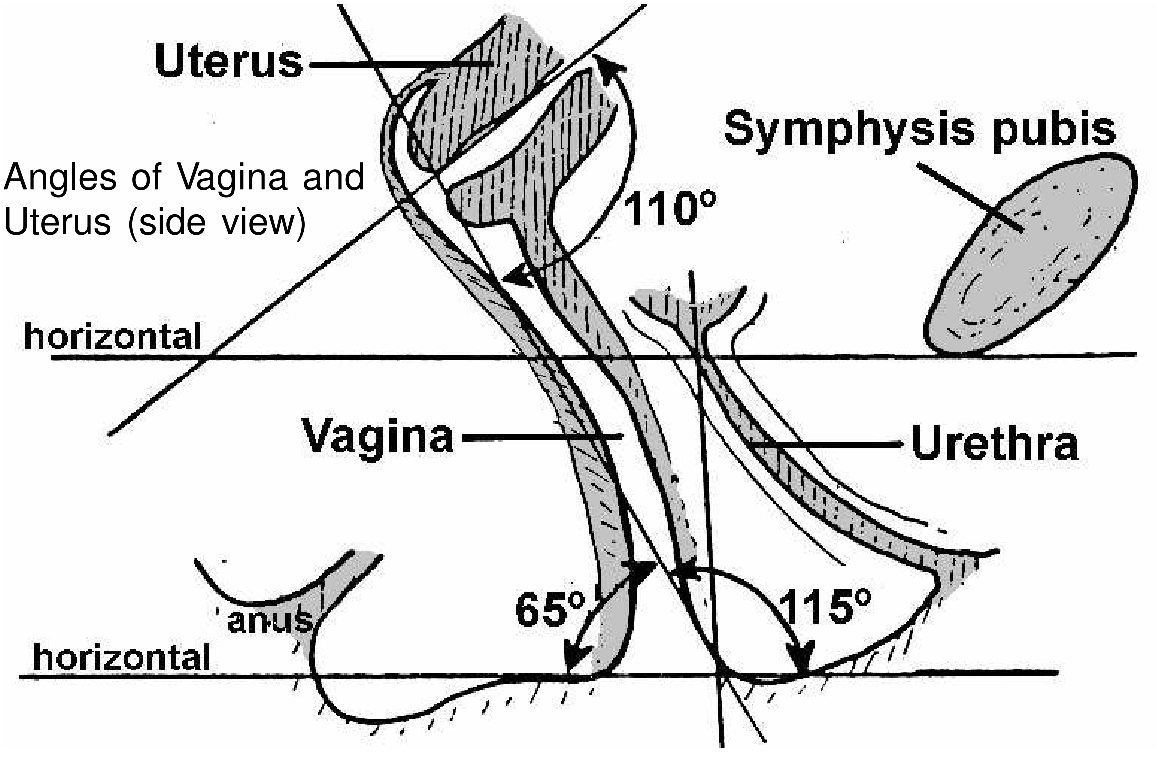



C
Plane of Inlet
Axis of Outlet
Axis of Inlet
B
Plane of Outlet
A

Pelvic Planes (above side view)
(A) the axis of the anal canal
(B) the axis of the rectal ampullа
(C) the axis of the sigmoid

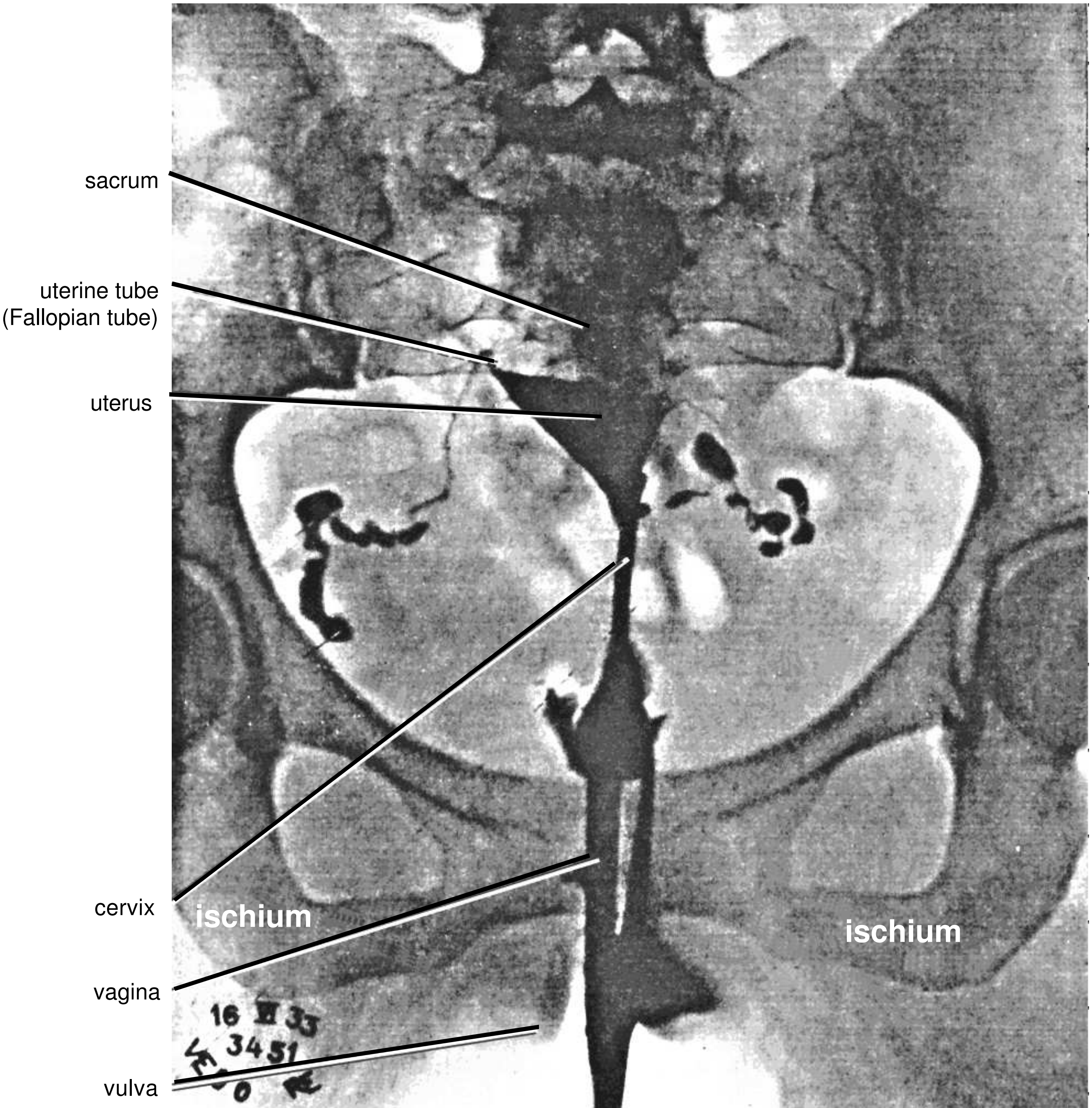

L5
I
U
B
S
P
Ur
Sc
P

MRI image of female internal genitalia during intercourse. (U) uterus (B) urinary bladder (S) symphysis pubis (P) male penis in vagina

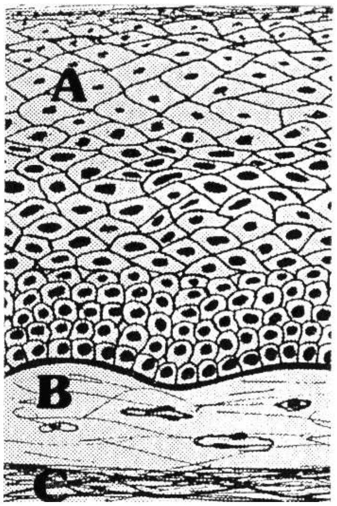

Uterus
Symphysis pubis
110°
horizontal
Vagina
Urethra
65°
115°
anus
horizontal

Angles of Vagina and Uterus (side view)

X ray image showing the relationship of the vagina, uterus and pelvic bones
An opaque dye fills the vagina, cervix and part of the uterus.

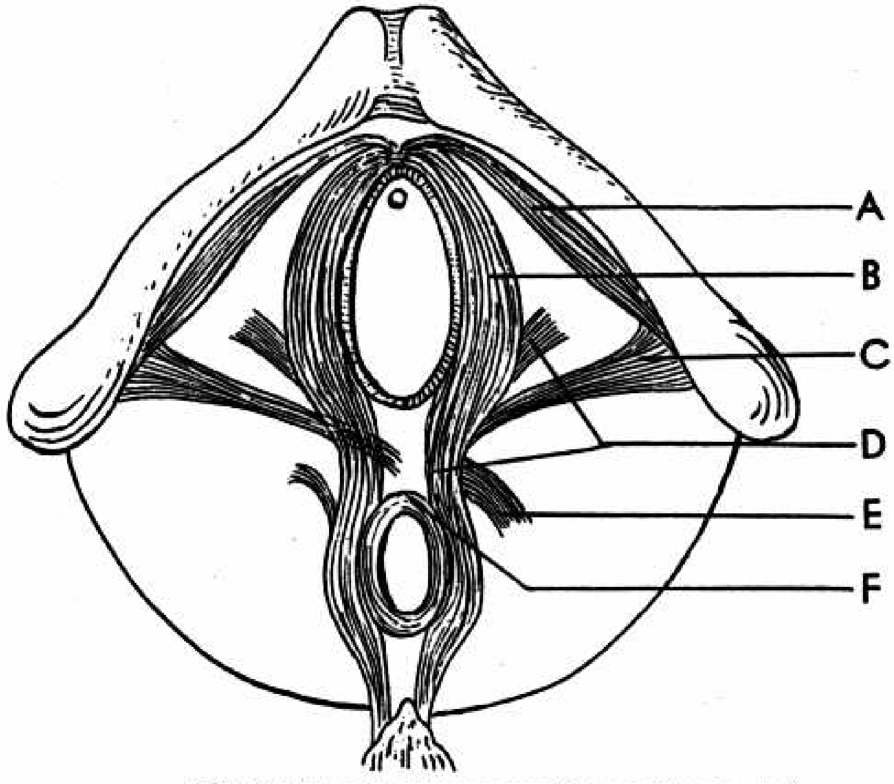

sacrum
uterine tube
(Fallopian tube)
uterus
cervix
ischium
ischium
vagina
vulva
16 III 33
3451

approximately a 65 degree angle to the horizontal and the uterus at an angle of 90 to 110 degrees to the vagina. Vaginal rugae (wrinkles or folds) let the vagina to expand during intercourse or childbirth. The rugae meet toward the midline as a ridge called the columna rugarum. The lining of the vagina is modified skin, although lacking the hardness of normal skin. Beneath the skin is a fibromuscular tissue which is richly supplied with blood vessels called the vaginal plexus. During intercourse this layer of the vagina becomes engorged with blood and turgid. Glycogen (a substance used to store engergy as a starch) is secreted by the vaginal lining; it breaks down into lactic acid which acts as a defence against infection. The vagina is usually collapsed into an 'H' shape with all the walls meeting.



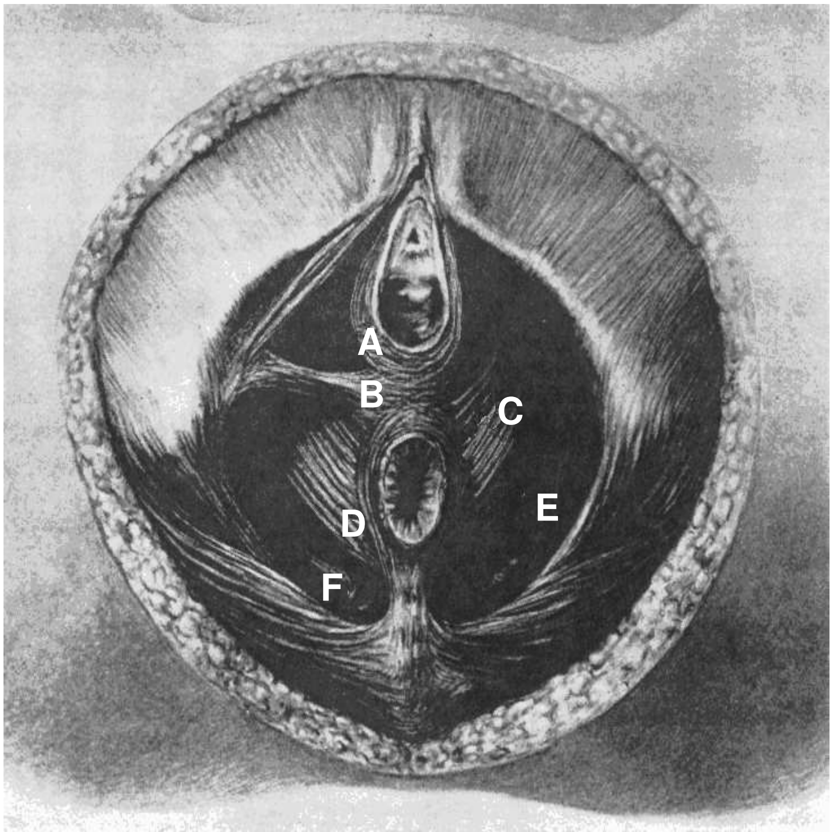
The major muscles of the vagina act within the first third of the vaginal length. Four important muscle groups form the orifice inward are: the ischiocavernosus muscle and superfical muscles, urogenital diaphragm or orgasmic shelf, pubococcygeus muscle (a wide strap-like muscle running under the vagina like a sling) and the intrinsic muscles of the lower end of the vagina. The ischiocavernosus and bulbocavernosus muscles pull the sides of the vagina gently inward and erect the clitoris by compressing the blood vessels in the crus causing blood to be trapped in the tissue. This muscle is near the mouth of the vagina and encircles it. The levator ani muscle pulls upward from the back on the lower third of the vagina. A condition known as vaginismus is caused by the levator ani muscle going into spasms and closing the entrance to the vagina. The pubococygenus is a part of the levator ani muscle and this muscle pulls upward on the vagina though slightly farther back. This muscle contracts involuntarily during orgasm. The end of the vagina is suspended by muscles and fiberous ligaments which radiate outward from where it attaches to the cervix. These muscles and ligaments are attached to the pelvis and help to support both the vagina and the uterus. The vagina has quite a bit of freedom of motion inside the body since it is not firmly bonded to any bones.

Above. The lining of the vagina in cross-section, greatly magnified. The inner-most cells (A) are skin cells without the hair folicles or oil glands that are found in regular skin. (B) the layer of the vagina which becomes engorged with blood (C) the muscular layer of the vagina



THE PERINEAL MUSCLES OF THE FEMALE (SCHEMATIC)

(A) Ischiocavernosus; (B) bulbocavernosus; (C) superficial transverse perineus muscle; (D) superficialis portion of external sphincter ani; (E) fibers of the profundus external sphincter; (F) encircling fibers of the subcutaneous external sphincter ani.



The levator ani muscle in the female from below

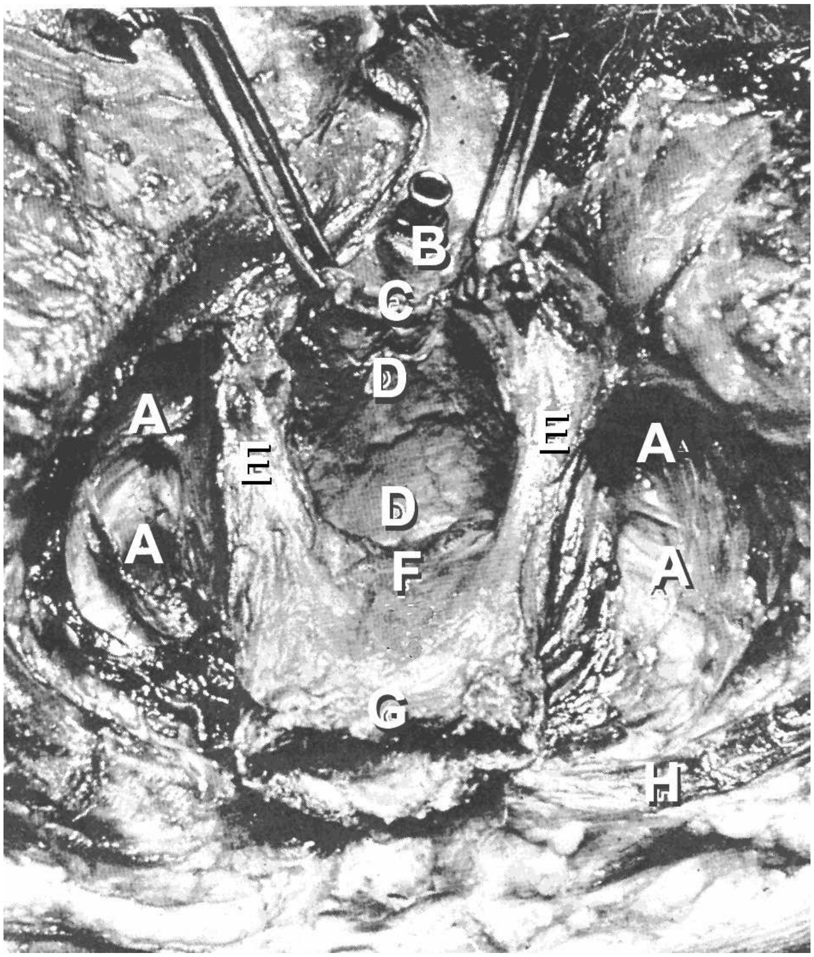
Note that the levator legs to the vagina are not shown here but lie deep to the superficial perineal musculature

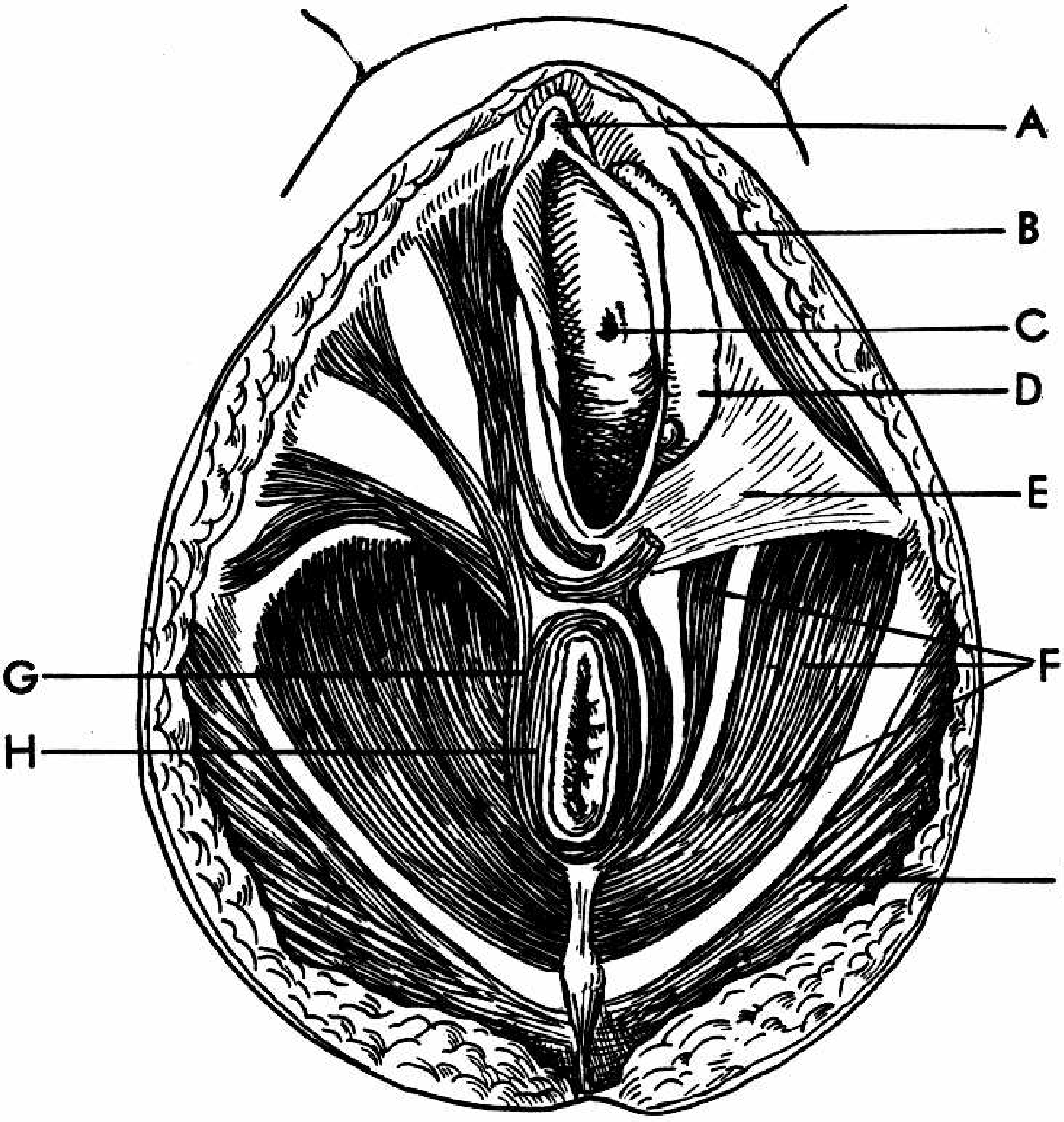
(A) bulbocavernosus
(B) sup. transverse perineus muscle
(C) pubococcygeus
(D) puborectalis muscle
(E) iliococcygeus
(F) ischiococcygeus

The sling-like arrangement of the pubococcygeal portions of the levator ani muscles is well shown in this dissection

Note their intimate relation to the anal sphincter. The hub of the needle lies in the urethra and the clamps retract the posterior vaginal wall.

(A) ischorectal fossa
(B) urethra
(C) posterior vaginal wall
(D) rectovaginal space (septum)
(E) levator ani legs
(F) anterior rectal wall
(G) external anal sphincter
(H) gluteus





Triangular Ligament in the Female. Drawn from Dissection

Note the wing of the triangular ligament on the left side. The superficial perineal muscles have been removed, exposing the bulb. Note also the arrangement of the anterior extensions of the superficialis portion of the external anal sphincter muscle. Its diverging legs reach the pubic arch and many of its fibers fuse with the bulbocavernosus muscle.

(A) Clitoris; (B) ischiocavernosus muscle; (C) urethra; (D) bulb; (E) *triangular ligament;* (F) levator ani; (G) superficial external sphincter muscle; (H) subcutaneous sphincter muscle; (I) gluteus maximus muscle.

The bulbs of the vagina and corpora cavernosa of the clitoris.
Diagram shows relationship of bulbs and cavernosa to the ischium and the vagina

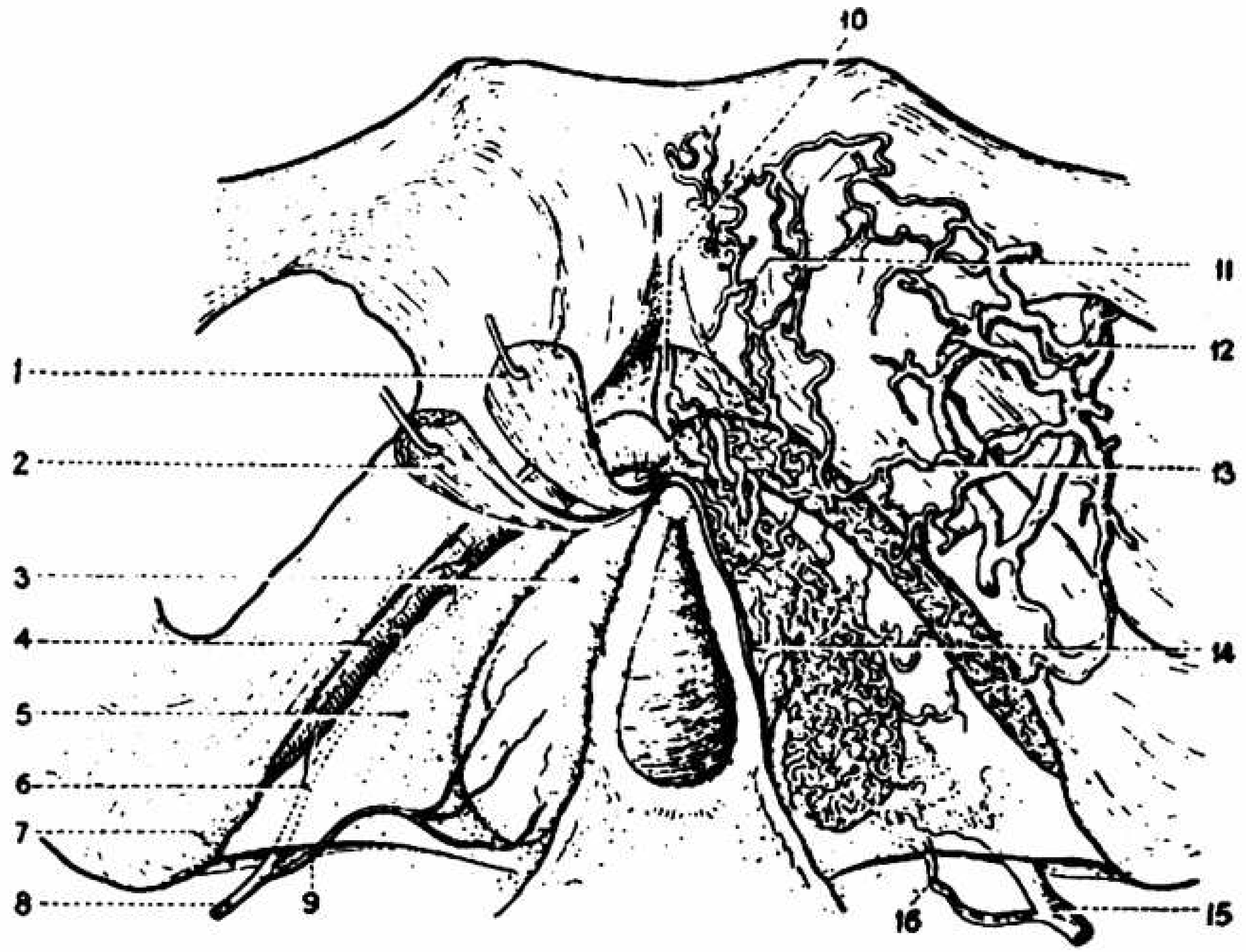


Figure 24. Bulbs of the vagina and the corpora cavernosa of the clitoris, seen from the front. On the patient's right is the artery; on the left are the veins. 1. Bulbocavernosus muscle. 2. Ischiocavernosus muscle. 3. Vaginal bulb in its albugineal sheath. 4. Peripheral portion, corpus cavernosum. 5. Middle perineal fascia. 6. Deep perineal artery. 7. Alcock's canal. 8. Internal pudendal artery. 9. Bulbar artery. 10. Dorsal vein of the clitoris. 11. Connections to the subcutaneous abdominal veins. 12. Obturator vein. 13. Connecting veins. 14. Veins of the labia minora. 15. Internal pudendal vein. 16. Bulbar vein.

Sexual Response and Orgasm

The first stage of sexual response is the excitment stage. During this stage the vagina expands in length as the uterus moves away from the bladder. Lubrication of the vagina begins within 30 seconds of stimulation as small drops of fluid begin to appear in the vagina by a process similar to sweating; total lubrication during intercourse may amount to several milliliters. The labia majora engorge with blood and spread outward as do the labia minora and the clitoris. The labia minora expand about three times their normal size. The clitoris is pulled down by the action of the pelvic muscles and also expands in size by two or three times, most of this increase is in the diameter of the glans clitors. Continued stimulation leads to continued physical response. The breasts increase in size through engorgement with blood and the nipples become erect.

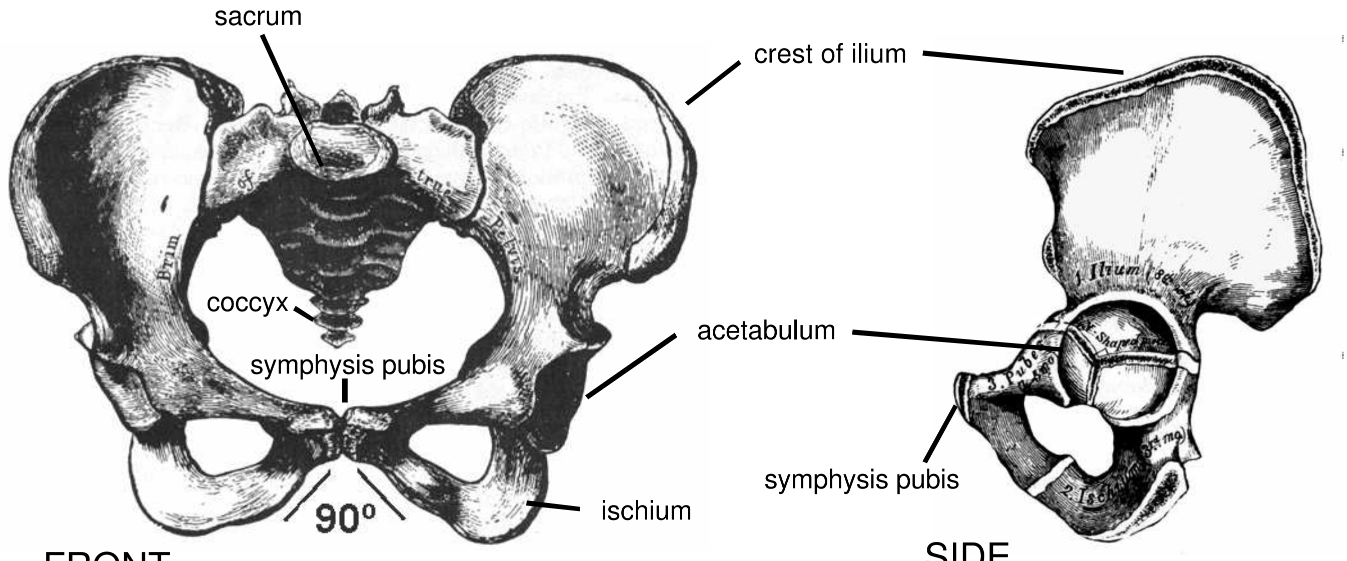
The next stage is the plateau stage which immediately preceeds orgasm or in the case of non-orgasm, the resolution stage. The vagina reaches its maximum length, the vaginal muscles contracting to hold the penis tighter. An orgasmic platform (muscles and vasocongestion of the vaginal lining form a cuff around the erect penis) forms. Signs of approaching orgasm include rapid involuntary pelvic thrusting, hyperventilation, flexing of the fingers and toes, and increased hear and respiration rates (heart rate goes from a normal 72 per minute to as high as 180 per minute, respiration rate increases from 16 to over 40 breaths per minute). The areole of the breasts expands in size.

The muscles near the mouth of the vagina and the lower third of the vagina contract at a rate of 3 or 4 contractions per minute. On top of these slow contractions, the levator ani muscle contracts at the rate of 15 to 20 per minute. Overall vaginal pressure in the outer third of the vagina increases due to the swelling of the smooth lining of the walls. Combining the effects of the various muscles we find that in the lower third of the vagina contractions come in groups of two or three once every twenty seconds or so. These increase in frequency and intensity until orgasm. Maximum pressure occurs approximately 3cm inside the vagina.

A number of involuntary contractions of the orgasmic platform signal orgasm. There are 10 to 15 contractions of the orgasmic platform and the superficial musculature (the ischiocavernosus, bulbocavernosus and transverse perineal muscles), each contraction lasting about 0.8 second and extending over a total period of 20 to 40 seconds. The contractions are of considerable strength and may be seen as a rapid elevation and depression of the clitoris as well as a bowing of the labia minora The pubococcygeus muscle also contracts during orgasm. Pressure exerted by the vagina is equivalent to a pressure of between twenty and thirty millimeters of mercury (a voluntary contraction). In metric this is 2.6kPa to 4.0kPa.

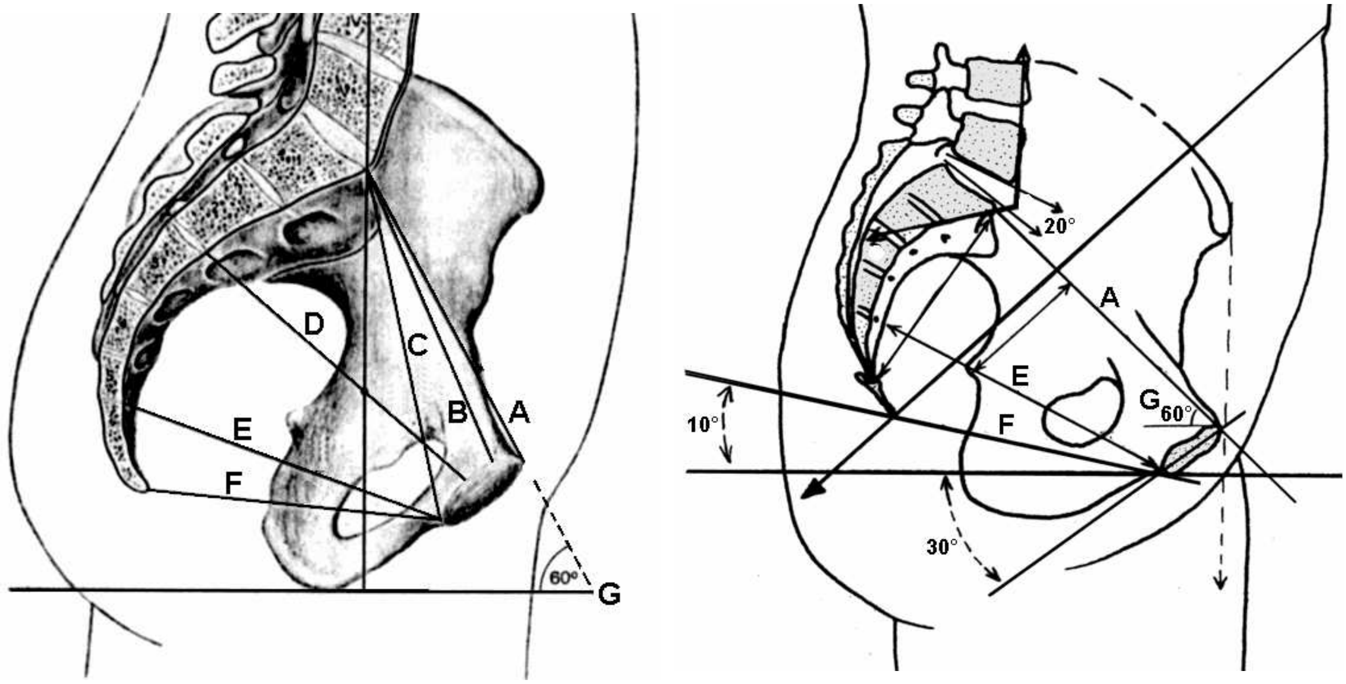
See the following pages for information on muscle contractions during stimulation and orgasm. Study the muscle diagrams to see how the various muscles support and apply pressure to the vagina, anus and clitoris.

Female Pelvis



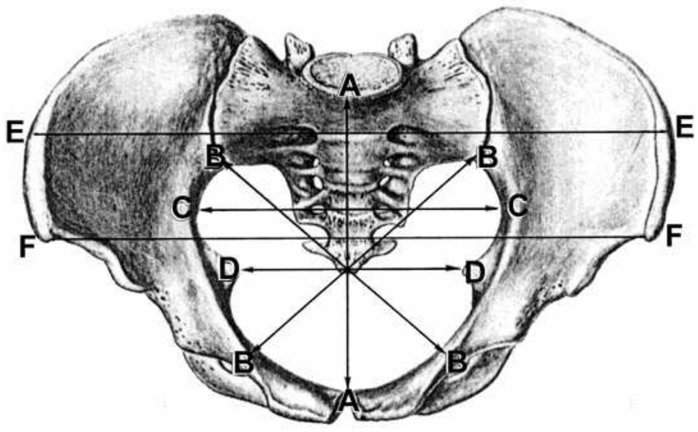
FRONT

SIDE



Pelvic Measurments and Inclination (diagrams above)

(A) conjugate diameter at pelvic inlet (B) true conjugate 11.5cm (normal)(C) diagonal conjugate 13cm (normal) (D) pelvic cavity at its widest (E) pelvic cavity at its narrowest (F) pelvic outlet (G) pelvic inclination (60°)

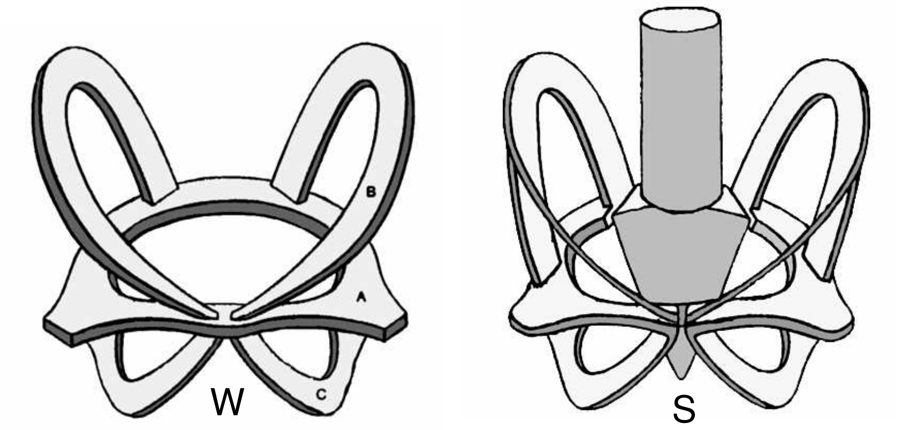


Diameters of the Female Pelvis (diagram left)

(A) conjugate (B) oblique (C) transverse (D) pelvic cavity between ischial spines (E) intercristal distance 29cm (normal) (F) interspinous distance 26cm (normal)

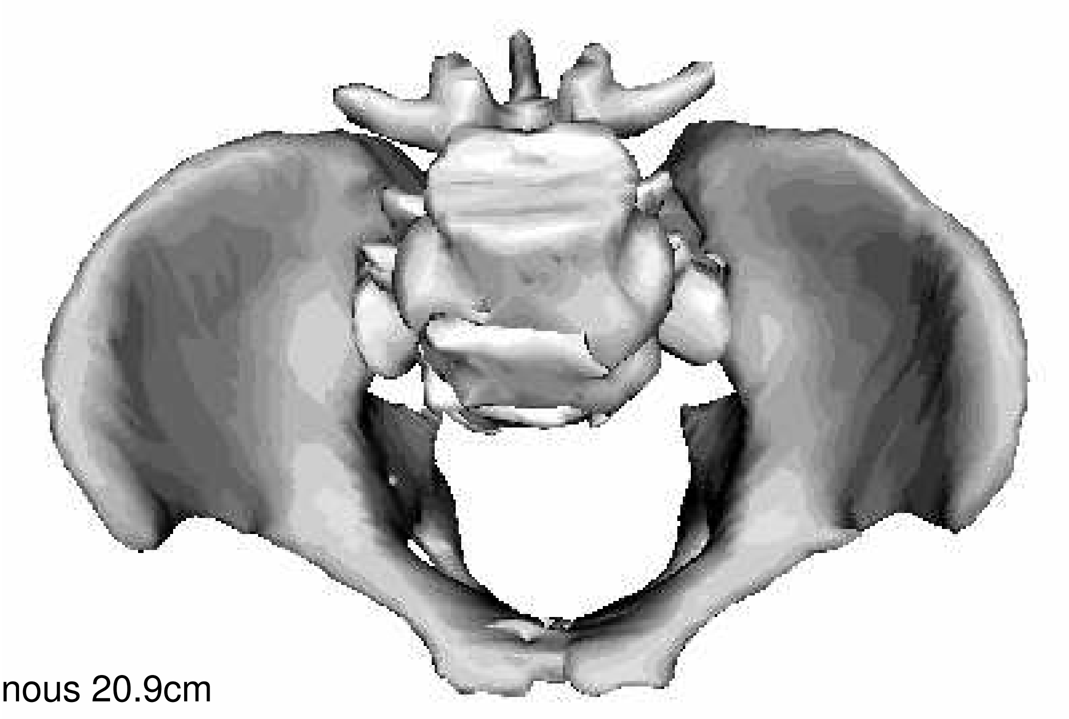
Diagrammatic representations of the Pelvis (diagrams right)

(W) weight bearing framework of the pelvis and (S) the structural framework of the pelvis

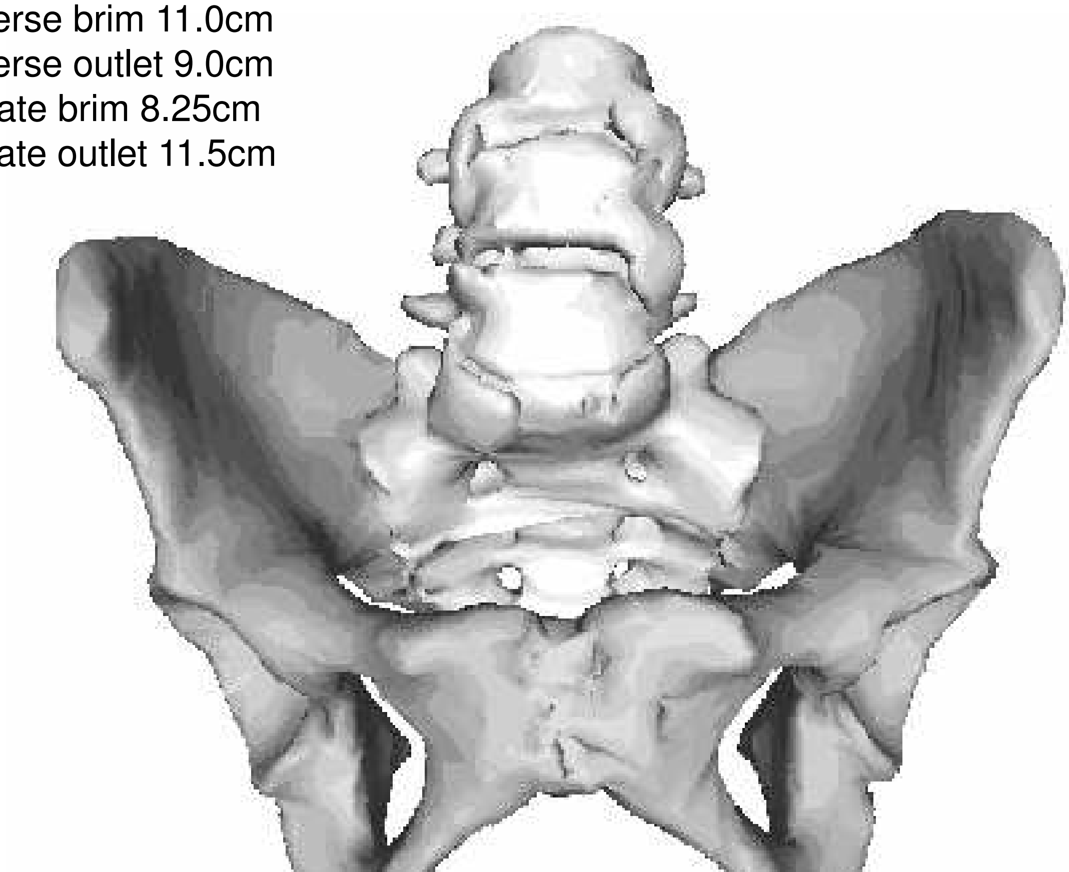


(A) ring of pelvic girdle (B) Cranial span (ilium) (C) Caudal span (ischium and pubis)

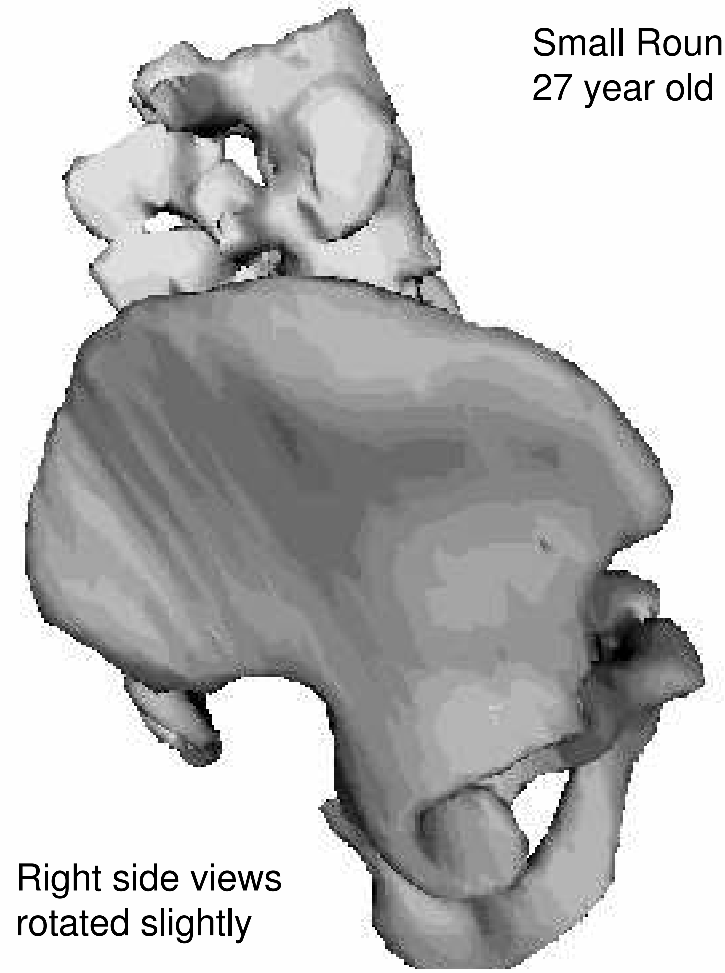
Small Round Pelvis
27 year old female



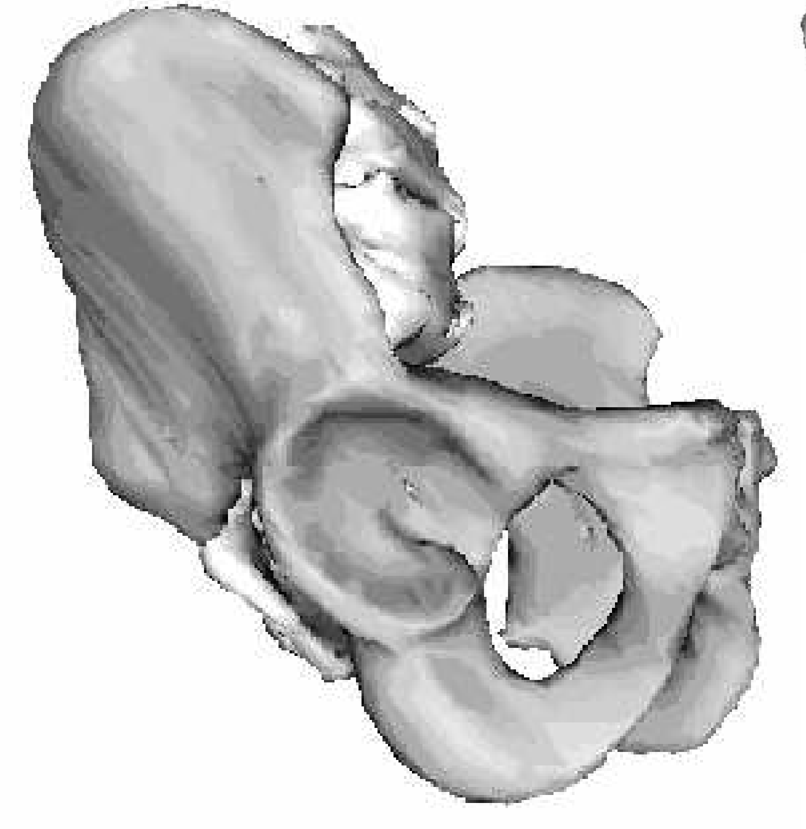
Interspinous 20.9cm
Intercristal 23.5cm
Transverse brim 11.0cm
Transverse outlet 9.0cm
Conjugate brim 8.25cm
Conjugate outlet 11.5cm

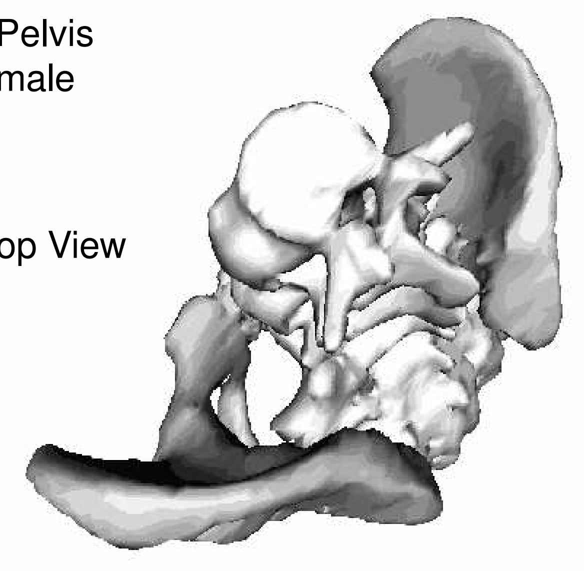


Small Round Pelvis
27 year old female

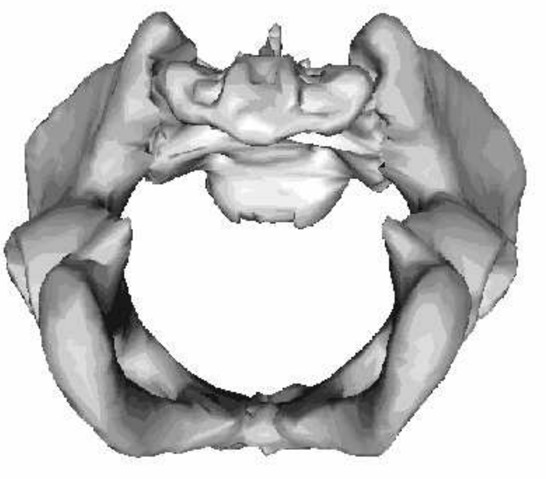


Right side views
rotated slightly

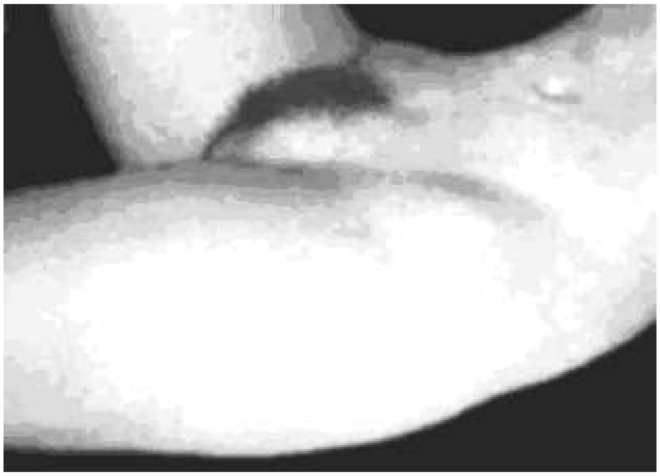




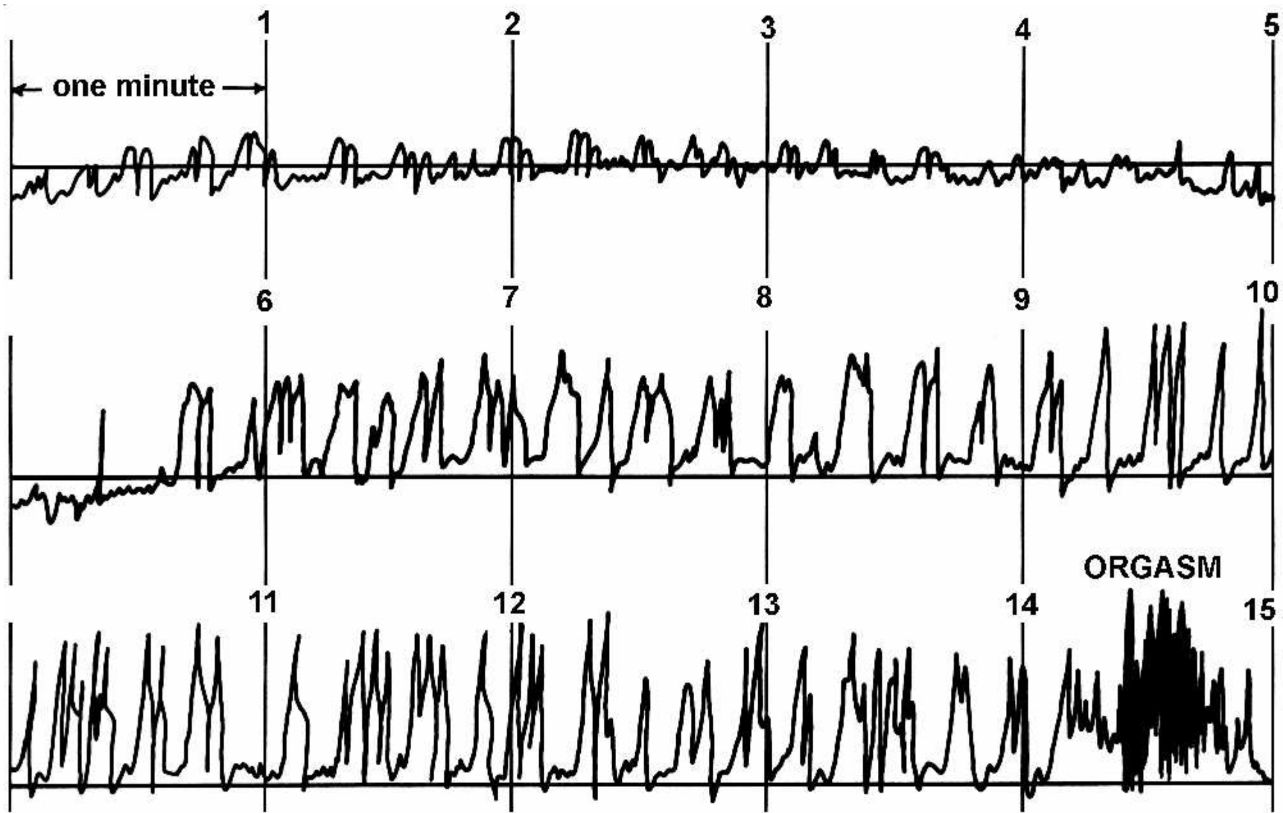
Top View



View from Below

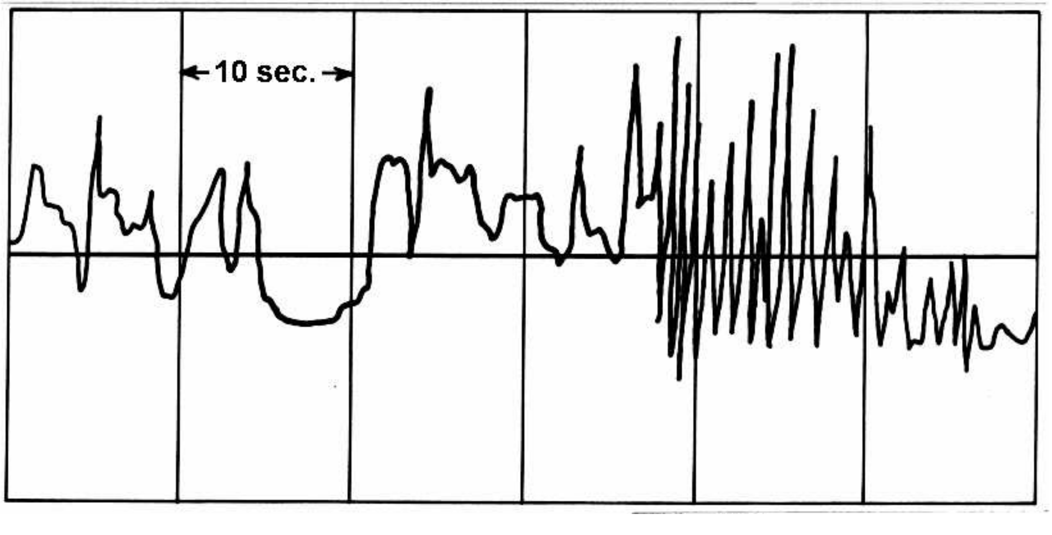


Pelvic Landmarks



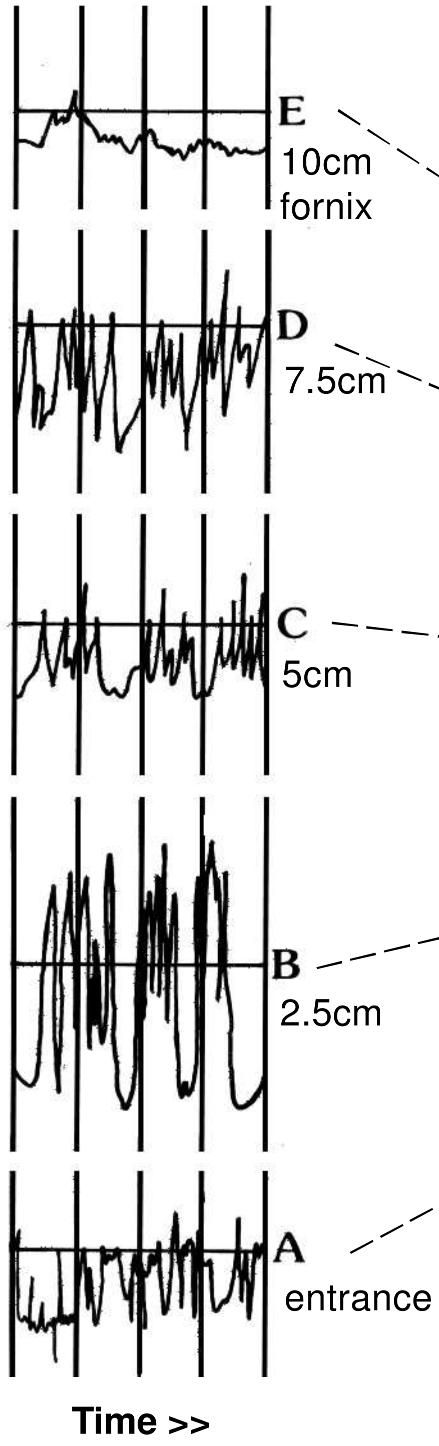
Vaginal pressure during stimulation and orgasm. This figure shows the recording from a pressure sensor located approximately 3cm inside the vaginal opening. Each division is one minute, 15 minutes in total. Maximum pressure about 4.0kPa

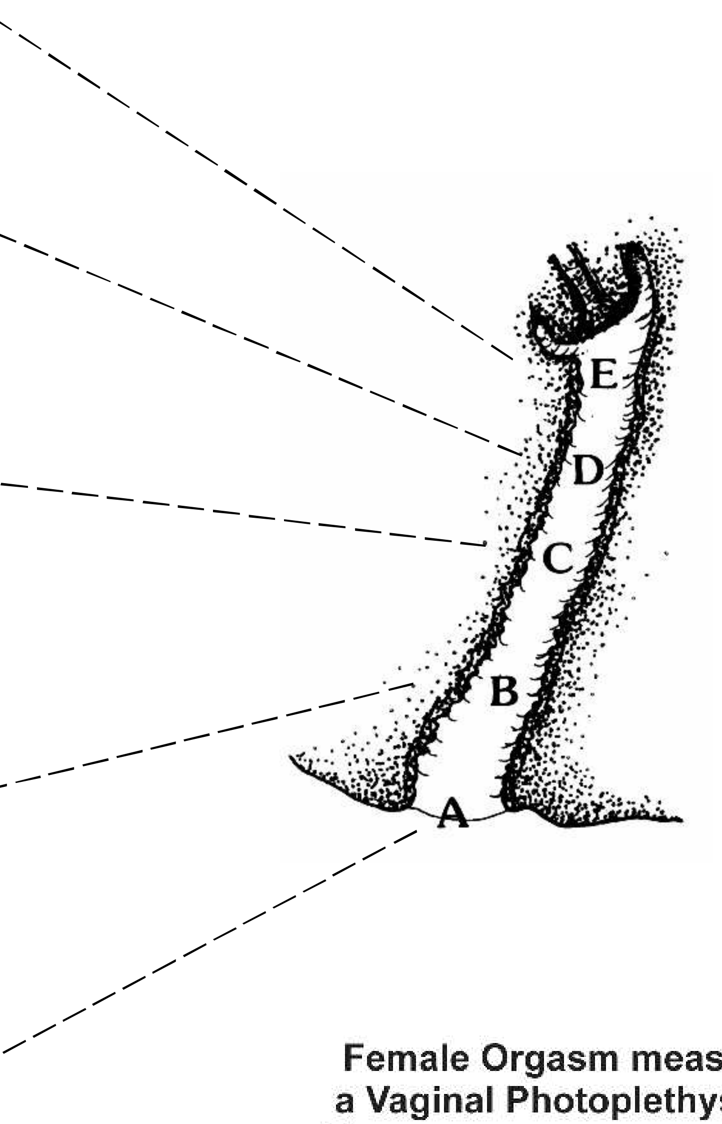
Detail of orgasm

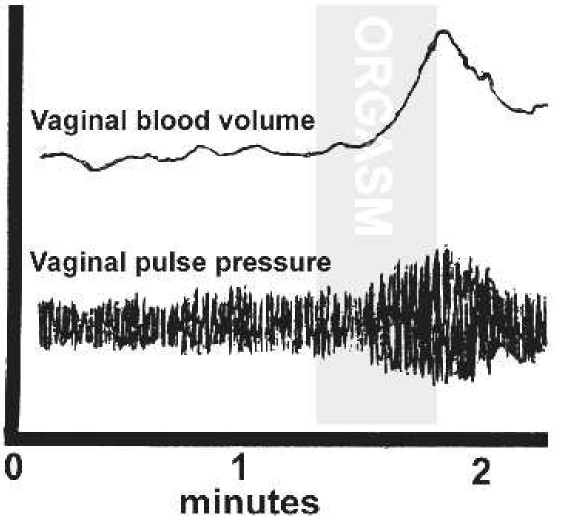


The final minute of the sexual response cycle. The closely spaced spiked waves are the orgasmic contractions

Vaginal pressure. At point B, 2.5cm inside the vagina the contractions are the strongest. At E, the fornix, 10cm inside the contractions are the weakest.



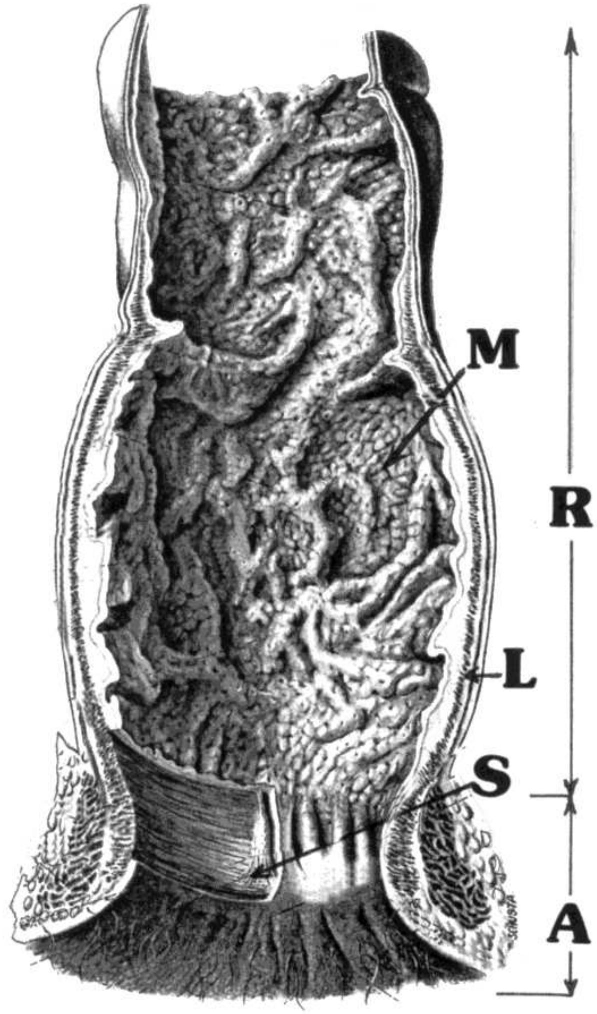


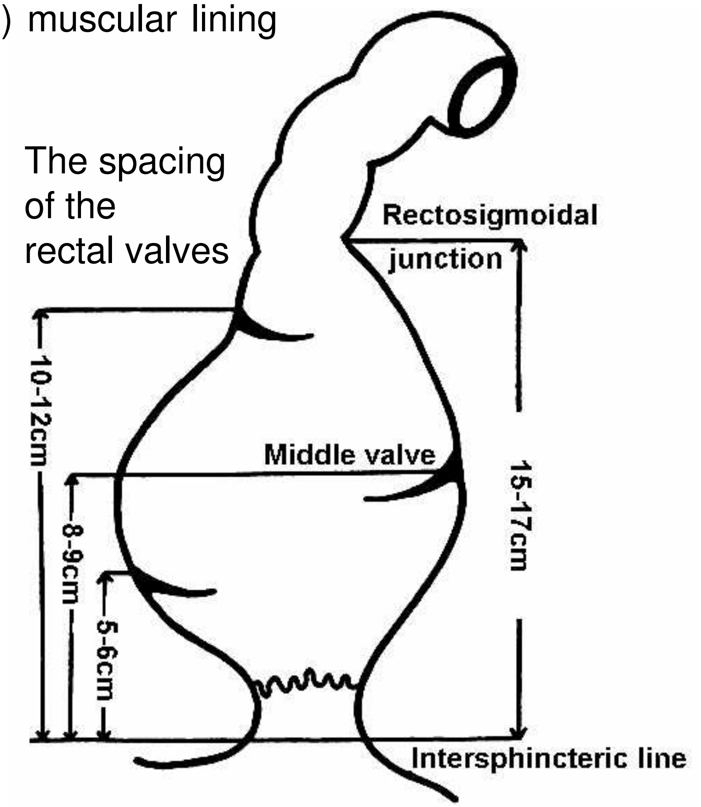


Female Orgasm measured with a Vaginal Photoplethysmograph

Blood volume in the vaginal walls during orgasm. Blood volume tightens the vagina. Test subject masturbated to orgasm and indicated beginning and end of her orgasm.

The rectum and anus
(R) rectum
(A) anus (opening)
(S) sphincter muscle
(M) mucosa lining
(L) muscular lining




The spacing of the rectal valves

The superficial layer of the anal region (superficial perineal space) is covered by thin skin and contains the cutaneous muscles together with finely lobed adipose tissue. The cutaneous muscles are partly nonstriated and partly striated. The nonstriated muscle bundles are derived from the external muscle coat of the rectum, fibers from which continue as tendinous strands into the subcutaneous fat. They provide an anchorage for the rectum. Because the external longitudinal muscle is absent, the circular muscle predominates and is further reinforced and thickened to form the massive sphincter ani internus muscle.

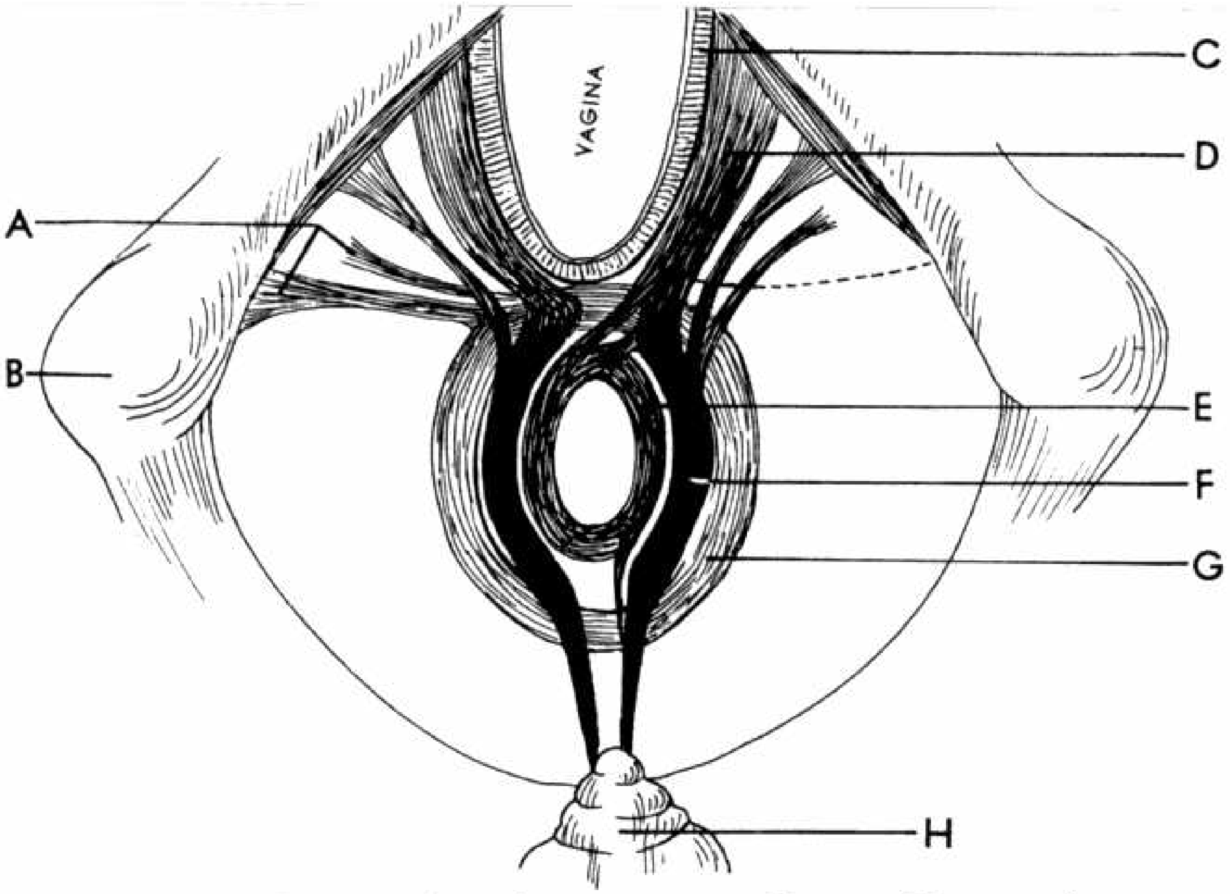
The superficial (subcutaneous) perineal space also contains the superficial vessels and nerves of the perineal region. When dissecting the anal region special attention must be paid to the cutaneous muscles, which are embedded in thesubcutis. The anal region is a subdivision of the perineal region. Unlike the urogenital region it is divided into two layers: above the superficial (subcutaneous) perineal space there is the supralevator space. Furthermore, the superficial perineal space can be seen to consist of two tiers separated by a boundary lamella. This boundary lamella divides the loose subcuteaneous fat from the coarsely lobed fat ofthe ischiorectal fossa, which lies below the levator ani (infralevator space).

The cutaneous muscles of the perineal region have a common basis in the sphincter cloacae muscle of lower vertebrates. The superficial layer of this sphincter muscle gives rise to the superficial part ofthe sphincter ani externus muscle, the bulbospongiosus muscles (bulbocavernosus muscles) and the ischiocavernosus muscles; the deep layer of the cloacal sphincter give origin to the deep part of the sphincter ani externus muscle and to the muscles of the urogental triogone.

The superficial subcutaneous layer of the anal region (superficial perineal space) contains finelylobulated fat, in which lie radiating strands from the sphincter ani externus muscle, connected with the anal canal.

The sphincter ani externus muscle is situated at the lower end of the rectum, encircling the anal canal. It forms a ring 2-3 cm in height and is subdivided into superficial and deep portions. The superficial portion crosses in front of and behind the anus, while the more deeply situtated bundles run to the coccyx and anococcygeal ligament posteriorly. Anteriorly, some bundles radiate into the bulbospongiosus muscle (bulbocavernosus muscle), so that viewed as a whole it forms a figure-of-eight pattern. The sphincter ani externus muscle is supplied by the pudendal nerve, which runs in company with and anterior to the inferior rectal vessels.

The Superficial layer. The skin is thin, smooth and soft. It may be pigmented and it contains numerous glands in the vicinity of the anus. 1-1.5 cm from the anal orifice there is a circle, up to 2 cm in breadth, containing numerous convoluted glands known as the circumanal glands.



External Anal Sphincter in the Female (Schematic)

Note that the *subcutaneous* portion of the external sphincter is usually annular but may partially decussate anteriorly or, less commonly, posteriorly. The *superficialis* arises, as in the male, from the sides of the coccyx, and surrounds the midportion of the anal canal in a spindle-shaped manner. Many of its fibers become continuous with the bulbocavernosus of the same side and additional small bundles of uncrossed fibers extending to the pubic rami are commonly found. Some of its fibers insert into the perineal body. The *profundus* portion, in close relation to the puborectalis posteriorly, surrounds the anal canal in an annular fashion. Its fibers may insert into the central perineal tendon. In many cases, however, the bulk of its fibers cross and, becoming continuous with the superficial transverse perineal muscle, insert into the pubic ramus of the opposite side. The free borders of the levator ani muscles forming the genital hiatus are in close relation to these fibers of the profundus external sphincter.

(A) Crossed fibers of profundus external sphincter ani; (B) ischial tuberosity; (C) vaginal wall; (D) bulbocavernosus; (E) subcutaneous external sphincter ani; (F) superficialis external sphincter ani; (G) profundus external sphincter ani; (H) coccyx.

Contemporary views on female pelvic anatomy

MATTHEW D. BARBER, MD, MHS

The durable surgical repair of pelvic organ prolapse and its related disorders remains a significant challenge. The pelvic reconstructive surgeon needs an intimate knowledge of relevant surgical landmarks as well as a fundamental understanding of the biomechanics of pelvic organ support in order to successfully restore normal visceral anatomy and function. Rather than presenting a detailed description of female pelvic anatomy, this review provides a discussion of the contemporary understanding of female pelvic organ support, with emphasis on the functional and surgical anatomy of the vagina, urethra, and pelvic floor, as well as a discussion of obturator anatomy, as several new innovative procedures now use the transobturator approach.

ORIENTATION OF THE BONY PELVIS

The pelvic bones are the ilium, ischium, pubic rami, sacrum, and coccyx. The bony pelvis is the rigid foundation to which all of the pelvic structures are ultimately anchored. Although pelvic surgeons often visualize the orientation of the pelvis in the supine or lithotomy position, it is important to understand and discuss the bony pelvis from the perspective of a standing woman. In the standing woman, the pelvis is oriented such that the anterior superior iliac spine and the front edge of the pubic symphysis are in the same vertical plane, perpendicular to the floor (Figure 1). As a consequence, the pelvic inlet is tilted anteriorly and the ischiopubic rami and genital hiatus are parallel to the ground. In the upright position, the bony arches of the pelvic inlet are oriented in an almost vertical plane. This directs the pressure of the intra-abdominal and pelvic contents toward the bones of the pelvis instead of the muscles and endopelvic fascia attachments of the pelvic floor. Thus, in the standing position, the bony pelvis is oriented such that forces are dispersed to minimize the pressures on the pelvic viscera and musculature and will transmit the forces to the bones that are better suited to the long-term, cumulative stress of daily life. Where the pubic rami articulate in the midline, they are nearly horizontal. Much of the weight of the abdominal and pelvic viscera is supported by the bony articulation inferiorly.

Varied shape, orientation associated with prolapse

Variations in the orientation and shape of the bony pelvis have been associated with the development of pelvic organ prolapse. Specifically, a loss of lumbar lordosis and a pelvic inlet that is less vertically oriented is more common in women who develop genital prolapse than in those who do not.[1,2] A less vertical orientation of the pelvic inlet is thought to result in an alteration of the intra-abdominal vector forces that are normally directed anteriorly to the pubic symphysis such that a greater proportion is directed toward the pelvic viscera and their connective tissue and muscular supports. Similarly, women with a wide transverse pelvic inlet appear to be at increased risk of developing pelvic organ prolapse.[3,4] Some have theorized that a wider pelvic inlet provides a larger hiatus for abdominal pressure transmission to the pelvic floor, which leads to loss of pelvic visceral support over time.[3] Variations in the shape and orientation of the bony pelvis are also an important factor that influences maternal soft-tissue damage and nerve injury during parturition.

PELVIC FLOOR MUSCULATURE

The skeletal muscles of the pelvic floor include the levator ani muscles, the coccygeus, the external anal sphincter, the striated urethral sphincter, and the deep and superficial perineal muscles. The muscles of

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Disclosure: Dr. Barber reported that he has no financial interests or affiliations that pose a potential conflict of interest with this article.

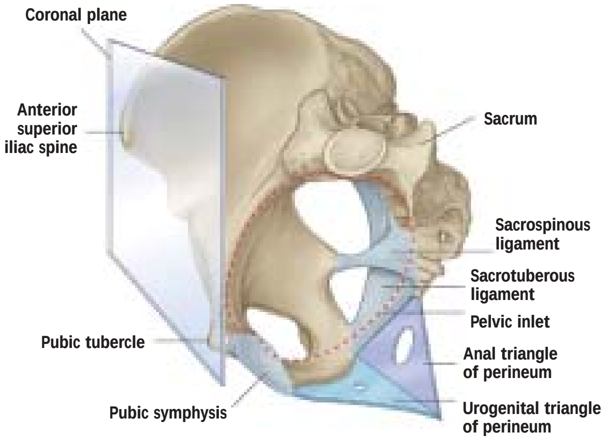

FIGURE 1. Orientation of the bony pelvis in the standing position. In this position, the anterior superior iliac spine and the pubic tubercle are perpendicular to the floor, whereas the urogenital triangle of the perineum is horizontal. Reprinted from Drake RL et al, eds, Gray's Anatomy for Students, copyright 2005, with permission from Elsevier.

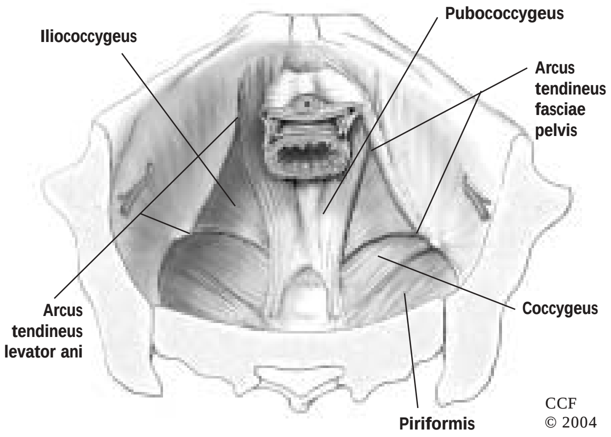

FIGURE 2. Illustration of the female pelvic floor showing relationships of the muscles of the pelvic floor and sidewalls and their attachments from an abdominal view. The arcus tendineus fasciae pelvis has been removed on the left, showing the origins of the levator ani muscles. On the right, the arcus tendineus fasciae pelvis remains intact, showing the attachment of the lateral vagina via the endopelvic fascia (cutaway).

the pelvic floor, particularly the levator ani muscles, have a critical role in supporting the pelvic visceral organs and play an integral role in urinary, defecatory, and sexual function. The levator ani muscle complex consists of the pubococcygeus (also called pubovisceral), the puborectalis, and the iliococcygeus (Figure 2).[5,6] The pubococcygeus originates on the posterior inferior pubic rami and inserts on the midline-visceral organs and the anococcygeal raphe. The puborectalis also originates on the pubic bone, but its fibers pass posteriorly and form a sling around the vagina, rectum, and perineal body, resulting in the anorectal angle and promoting closure of the urogenital hiatus. The iliococcygeus originates from the arcus tendineus levator ani (ATLA), a linear thickening of the fascial covering of the obturator internus that runs from the ischial spine to the posterior surface of the ipsilateral superior pubic ramus. It inserts in the midline onto the anococcygeal raphe. The space between the levator ani musculature through which the urethra, vagina, and rectum pass is called the urogenital hiatus. The fusion of levator ani where they meet in the midline creates the so-called levator plate.

Constant resting tone, quick contraction ability

Pelvic floor muscles have a constant resting tone except during voiding, defecation, and the Valsalva maneuver. This activity serves to close the urethral and anal sphincters, narrow the urogenital hiatus, and provide a constant support for the pelvic viscera. The levator muscles and the skeletal components of the urethral and anal sphincters all have the ability to contract quickly at the time of an acute stress, such as a cough or sneeze, in order to maintain continence and to relax during evacuation.

Three-dimensional structure for levator ani complex

Although most anatomy and surgical texts depict the levator ani muscles as a bowl or funnel-shaped, this reflects the uncontracted state of the muscles as might be seen in a cadaver dissection and not that of a normally functioning levator. In a woman with normal pelvic floor function, the levator ani muscle complex in its tonically contracted state has an intricate three-dimensional structure in which its anterior portion (pubococcygeus and puborectalis) is oriented vertically as a sling around the mid-urethra, vagina, and anorectum and its posterior portion (the iliococcygeus) has a horizontal upwardly biconvex shape resembling a butterfly wing (Figure 3).[7] Thus, the anterior portion of the levator ani complex serves to close the urogenital hiatus and pull the urethra, vagina, perineum, and anorectum toward the pubic bone, whereas the horizontally oriented posterior portion (levator plate) serves as a supportive diaphragm or "backstop" behind the pelvic viscera. Loss of normal levator ani tone, through denervation or direct muscle trauma, results in laxity of the urogenital hiatus, loss of the horizontal orientation of the levator plate, and a more bowl-like configuration. These changes can be bilateral or asymmetric.[8]

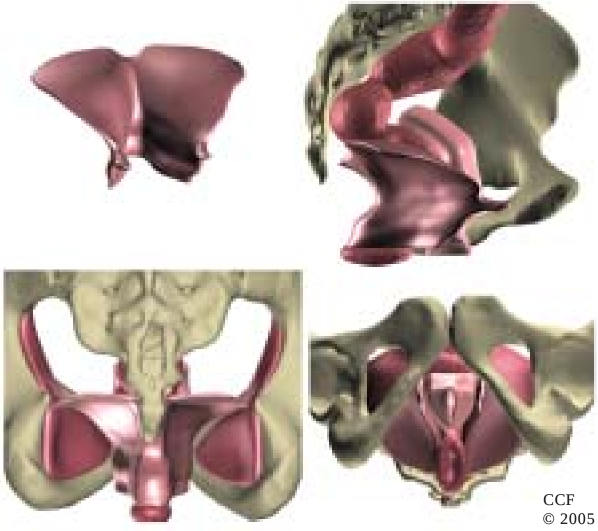

FIGURE 3. Digitally enhanced three-dimensional reconstructions of the female pelvic floor from a magnetic resonance image of the pelvis in a normal nulliparous 23-year-old woman. Upper left: anterior view of the levator ani muscle with normal resting tone. Upper right: sagittal view of the levator ani muscle, bony pelvis, vagina, and rectum. Lower left: posterior view of the levator ani muscle, obturator internus muscles, and bony pelvis. Lower right: lithotomy view.

Such configurations are seen more often in women with pelvic organ prolapse than in those with normal pelvic organ support.[7]

INNERVATION OF THE PELVIC FLOOR MUSCLES

The pudendal nerve innervates the striated urethral and anal sphincters as well as the deep and superficial perineal muscles and provides sensory innervation to the external genitalia. This nerve follows a complex course that originates from S2–S4 (with S3 providing the largest contribution) and travels behind the sacrospinous ligament just medial to the ischial spine, exiting the pelvis through the greater sciatic foramen. It then enters the ischiorectal fossa through the lesser sciatic foramen and travels through the pudendal canal (Alcock's canal) on the medial aspect of the obturator internus muscles before separating into several terminal branches that terminate within the muscles and skin of the perineum.

New insights into levator ani innervation

Many anatomic and surgical texts suggest that the levator ani muscles are dually innervated from (1) the pudendal nerve on the perineal surface and (2) direct branches of the sacral nerves on the pelvic surface. However, recent anatomic,[9] neurophysiologic,[10,11] and experimental evidence[12–14] indicates that these standard descriptions are inaccurate and that the levator ani muscles are innervated solely by a nerve traveling on the superior (intrapelvic) surface of the muscles without contribution of the pudendal nerve. This nerve, referred to as the levator ani nerve, originates from S3, S4, and/or S5 and innervates both the coccygeus and the levator ani muscle complex.[9] After exiting the sacral foramina, it travels 2 to 3 cm medial to the ischial spine and arcus tendineus levator ani across the coccygeus, iliococcygeus, pubococcygeus, and puborectalis **(Figure 4)**. Occasionally, a separate nerve comes directly from S5 to innervate the puborectalis muscle independently.

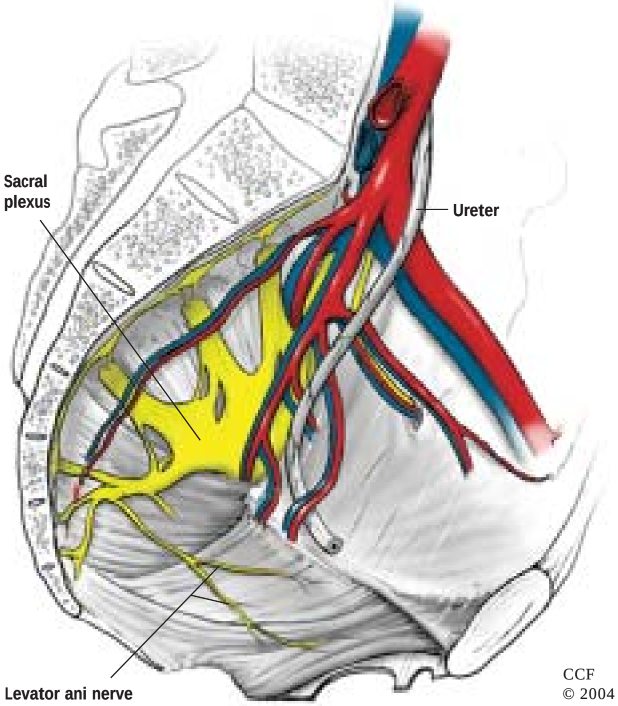

FIGURE 4. Sagittal view of the pelvis showing the arterial (red) and venous (blue) blood supply and nerves.

Given its location, the levator ani nerve is susceptible to injury through parturition and pelvic surgery. Specifically, the fixation points used in the sacrospinous ligament fixation and the iliococcygeus vaginal vault suspensions are in close proximity to the course of the levator ani nerve. However, the impact that potential injury has on the long-term anatomic and functional success of these procedures is currently unknown.

PERINEUM

Although the area between the vagina and anus is described clinically as the "perineum," anatomical-

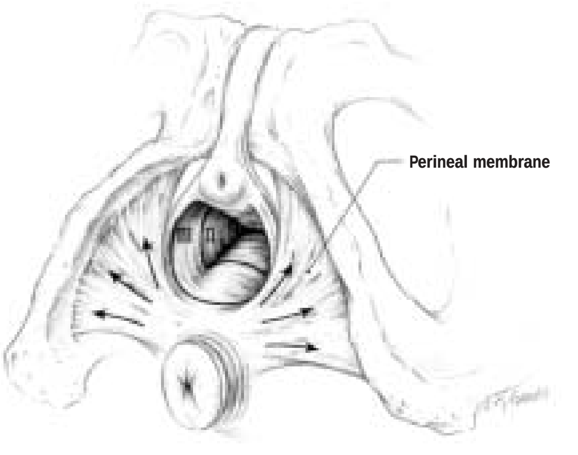

FIGURE 5. Perineal membrane with its attachments to the inferior pubic rami and direction of tension on fibers uniting through the perineal body (arrows). Reprinted from reference 16, copyright 1999, with permission from Elsevier.

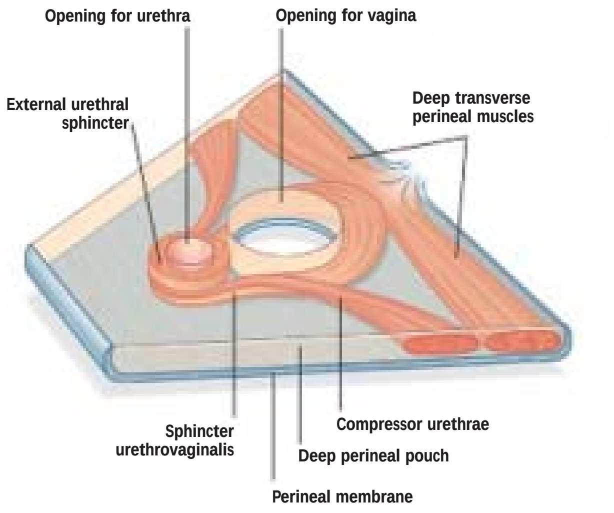

FIGURE 6. Muscles of the deep perineal space. The perineal membrane is in the horizontal plane in the standing position. The muscles of the deep perineal space lie cephalad to the perineal membrane and below the levator ani muscles. Reprinted from Drake RL et al, eds, Gray's Anatomy for Students, copyright 2005, with permission from Elsevier.

ly the perineum is the entirety of the pelvic outlet inferior to the pelvic floor. The area between the vagina and anus is more aptly termed the *perineal body*. The borders of the female perineum are the ischiopubic rami, ischial tuberosities, sacrotuberous ligaments, and coccyx. A line connecting the ischial tuberosities divides the perineum into the urogenital triangle anteriorly and the anal triangle posteriorly. In the standing position, the urogenital triangle is oriented horizontally, whereas the anal triangle is tilted upward so that it faces more posteriorly (Figure 1).

The perineal membrane is a thick fibrous sheet that spans the urogenital triangle (Figure 5). It attaches laterally to the pubic arch and has a free posterior margin anchored in the midline by the perineal body. Although historically anatomists and clinicians have used the term *urogenital diaphragm* to describe this structure, this term has been abandoned because it erroneously implies a muscular diaphragm rather than a thick sheet of connective tissue.[15,16] The urethra and vagina penetrate through a hiatus in the perineal membrane (the urogenital hiatus) to exit at the vestibule. The perineal membrane, therefore, provides fixation of distal urethra, distal vagina, and perineal body to the pubic arches.

The urogenital triangle is divided into a superficial and deep perineal space by the perineal membrane. The superficial perineal space contains the superficial perineal muscles (ischiocavernosus, bulbospongiosus, superficial transverse perineal muscles), the erectile tissue of the clitoris, the vestibular bulbs, and Bartholin's glands. The deep perineal space lies just deep to the perineal membrane and inferior to the levator ani muscles. Within this thin space lie the external urethral sphincter and the urethrovaginalis, compressor urethrae, and deep transverse perineal muscles (Figure 6).[15,17] The urethrovaginalis and compressor urethrae muscles provide accessory sphincter function to the urethra.[17] The urethrovaginalis muscle surrounds the distal urethra and vagina without passing between them and therefore acts as a sphincter to the vagina as well as to the distal urethra.[15] The deep transverse perineal muscle, along with its superficial counterpart, serves to stabilize the position of the perineal body and inferior border of the perineal membrane. There is some dispute as to whether the deep transverse perineal muscle is present in females, however.[15]

The perineal body marks the point of convergence of the bulbospongiosus muscle, superficial and deep transverse perinei, perineal membrane, external anal sphincter, posterior vaginal muscularis, and fibers from the puborectalis and pubococcygeus. The perineal body plays an important role in support of the distal vagina and in normal anorectal function. The vascular and nerve supply to the perineum, including the deep and superficial perineal spaces, is provided by the pudendal neurovascular bundle.

VAGINA

The vagina is a hollow, distensible, fibromuscular tube with rugal folds that extends from the vestibule to the uterine cervix. Its longitudinal shape resembles a trapezoid, as it is narrowest at the introitus and grows progressively wider as it approaches the vaginal apex and cervix. In the transverse dimension, the vagina is H-shaped at its distal end (toward the introitus) and flattened proximally. In the sagittal plane, the vagina has a distinct angulation so that its upper two thirds is directed toward the third and fourth sacral vertebrae and is almost horizontal in the standing position. In contrast, the lower third is nearly vertical as it passes through the perineal membrane to the vestibule. The angle between the upper and lower axes of the vagina is approximately 130°.[18]

Three layers of vaginal wall

Histologically, the vaginal wall is composed of three layers: mucosa, muscularis, and adventitia.[19,20] The vaginal mucosa is the most superficial layer and consists of stratified squamous epithelium and a lamina propria. The vaginal muscularis is a well-developed fibromuscular layer consisting primarily of interdigitating smooth muscle bundles with smaller amounts of collagen, elastin, and vascular tissue.[19,20] The outermost adventitia is a variably discrete layer of collagen, elastin, and adipose tissue containing blood vessels, lymphatics, and nerves. The adventitia represents an extension of the visceral endopelvic fascia that surrounds the vagina and adjacent pelvic organs and allows for their independent expansion and contraction.

No 'fascial' layer

Some have used the terms *pubocervical fascia* and *rectovaginal fascia* to describe the layer separating the vagina from the bladder and rectum, respectively. Although these terms are widely used, "fascia" is a misnomer in this context, as it does not accurately reflect the histology of the vagina. Numerous authors have performed histologic analysis of the vaginal wall and have failed to identify a distinct "fascial" layer.[16,19,20] Between the adjacent pelvic organs is primarily vaginal muscularis. The "fascia" often noted by pelvic surgeons during vaginal dissection refers, in fact, to layers that are developed as a result of separating the vaginal epithelium from the muscularis, or by splitting the vaginal muscularis layer.[19] The one area where there does appear to be dense connective tissue separating the vagina from an adjacent organ is the distal posterior vaginal wall. The connective tissue of the perineal body extends 2 to 4 cm cephalad from the hymenal ring along the posterior vaginal wall between the smooth muscle layers of the vagina and the rectum.[16] This layer does not, however, extend the full length of the posterior vaginal wall.

SUPPORT OF THE VAGINA AND UTERUS

The normal axis of the pelvic organs in the standing woman places the upper two thirds of the vagina directly over the levator plate. The endopelvic fascia is the loose connective tissue network that envelops all of the organs of the pelvis and connects them loosely to the supportive musculature and bones of the pelvis. Histologically, it is composed of collagen, elastin, adipose tissue, nerves, vessels, lymph channels, and smooth muscle. This connective tissue network tethers the vagina and uterus in their normal anatomic location while allowing for the mobility of the viscera to permit storage of urine and stool, coitus, parturition, and defecation.

Several areas of the endopelvic fascia (and its associated peritoneum) have been named by anatomists. These are condensations of the endopelvic fascia and not true "ligaments": uterosacral ligament, cardinal ligament, broad ligament, mesovarium, mesosalpinx, and round ligament. The broad ligament, mesovarium, mesosalpinx, and round ligament do not play a role in support of the pelvic organs.

Three integrated levels of support

DeLancey described the connective tissue supports of the vagina in three levels[21] (**Figure 7**). The uterosacral/cardinal ligament complex, which comprises level I support, is an intricate three-dimensional connective tissue structure that originates at the cervix and upper vagina and inserts at the pelvic sidewall and sacrum. Magnetic resonance images in healthy women reveal that the uterosacral ligament inserts in the area of the coccygeus and sacrospinous ligament in most women, with only 7% actually inserting into the sacrum.[22] The uterosacral/cardinal ligament complex suspends the uterus and upper vagina in its normal orientation. It serves to maintain vaginal length and keep the vaginal axis nearly horizontal in a standing woman so that it can be supported by the levator plate. Loss of level I support contributes to prolapse of the uterus and/or vaginal apex.

Contiguous with the uterosacral/cardinal ligament complex at the location of the ischial spine is level II support—the paravaginal attachments. The anterior vagina is suspended laterally to the arcus tendineus fasciae pelvis (ATFP), or white line, which is a thickened condensation of fascia overlying the iliococ-

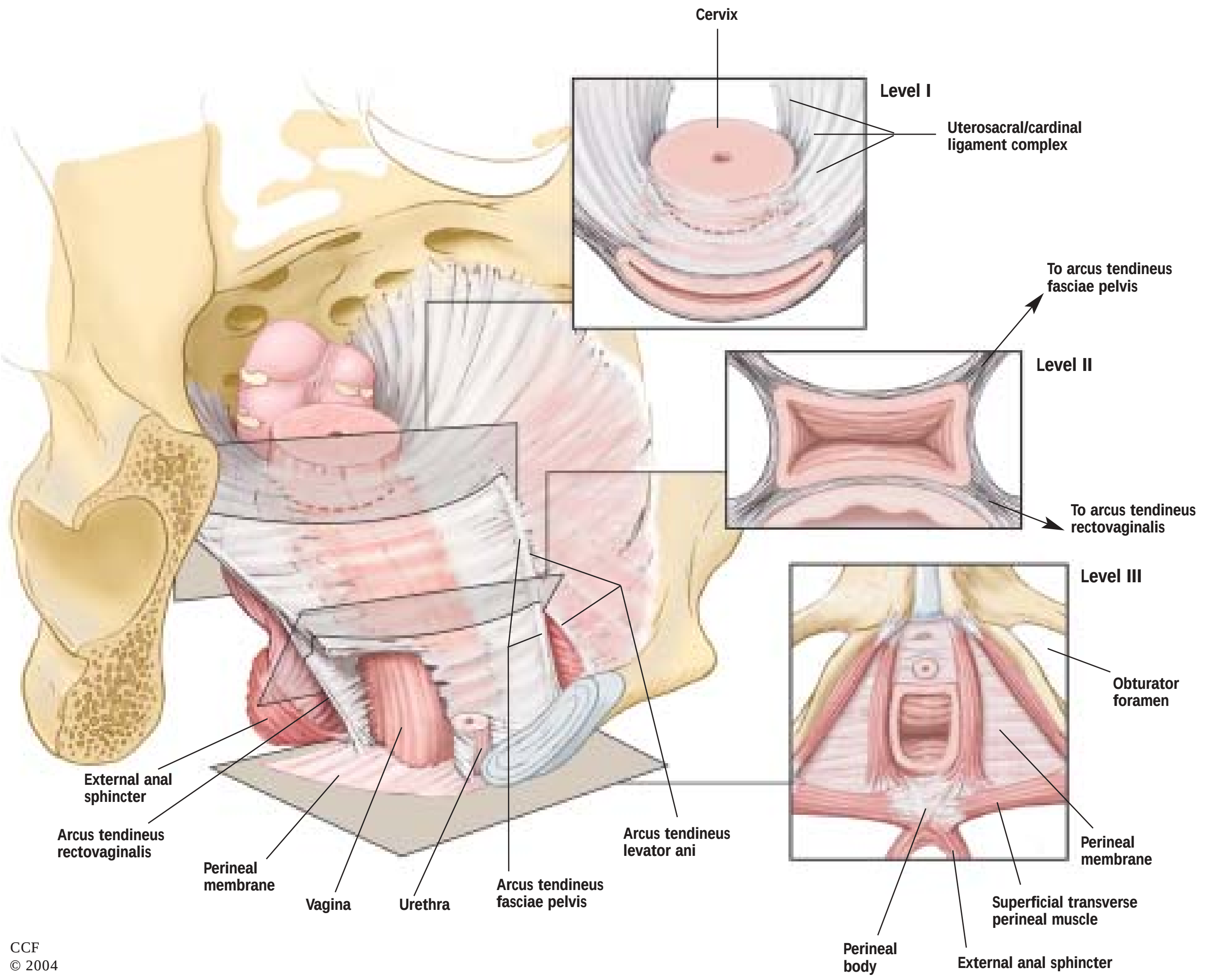
Cervix
Level I
Uterosacral/cardinal ligament complex
To arcus tendineus fasciae pelvis
Level II
To arcus tendineus rectovaginalis
Level III
Obturator foramen
Perineal membrane
Superficial transverse perineal muscle
Perineal body
External anal sphincter
External anal sphincter
Arcus tendineus rectovaginalis
Perineal membrane
Vagina
Urethra
Arcus tendineus fasciae pelvis
Arcus tendineus levator ani
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FIGURE 7. Integrated levels of support: illustration of the normal vaginal axis and the three levels of support of the vagina and uterus from the perspective of a standing woman. In level I, the endopelvic fascia suspends the upper vagina and cervix from the lateral pelvic walls. Fibers of level I extend both vertically and posteriorly toward the sacrum. In level II, the vagina is attached to the arcus tendineus fasciae pelvis and superior fascia of the levator ani muscles. In level III, the distal vagina is supported by the perineal membrane and muscles. The insets show transverse sections made through the vagina perpendicular to the normal vaginal axis at each level.

cygeus. The ATFP originates on the ischial spine and inserts on the inferior aspect of the pubic symphysis. The anterior level II supports suspend the mid-portion of the anterior vaginal wall, creating the anterior lateral vaginal sulci. Detachment of these lateral supports can lead to paravaginal defects and prolapse of the anterior vaginal wall.

In addition to the anterior paravaginal supports, there are posterior lateral supports at level II as well. The posterior vaginal wall is attached laterally to the pelvic sidewall in a slightly more complex arrangement than the anterior vaginal wall. The distal half of the posterior vaginal wall fuses with the aponeurosis of the levator ani muscle from the perineal body along a line referred to as the arcus tendineus rectovaginalis. It converges with the ATFP at a point approximately midway between the pubic symphysis and the ischial spine.[23] Along the proximal half of the vagina, the anterior and posterior vaginal walls are both supported laterally to the ATFP. Thus, in the proximal vagina, the lateral supports for the anterior and posterior vaginal wall are identical. This arrangement accounts for the H-shape or box-like configuration of the distal vagina when viewed in cross-section and the flattened-tube configuration seen in the upper vagina (Figure 7).

Level III support is provided by the perineal membrane, the muscles of the deep perineal space, and the perineal body. These structures support and maintain the normal anatomical position of the urethra and the distal third of the vagina, which is perpendicular to the floor in a standing woman. At level III, the vagina fuses with the urethra anteriorly and with the perineal body posteriorly. Disruption of level III support anteriorly can result in urethral hypermobility and stress incontinence, and disruption posteriorly may result in distal rectoceles and/or perineal descent.

INTERACTIONS BETWEEN MUSCULAR AND CONNECTIVE TISSUE SUPPORTS

Normal pelvic organ support and function depends on dynamic interaction between the pelvic floor musculature and the endopelvic fascia. In a standing woman, the endopelvic fascia suspends the upper vagina, the bladder, and the rectum over the levator plate while the pelvic floor muscles close the urogenital hiatus and provide a stable platform on which the pelvic viscera rests. Intra-abdominal and gravitational forces are applied perpendicular to the vagina and pelvic floor while the pelvic floor musculature counters those forces with its constant tone by closing. With proper tone of the pelvic floor muscles, stress on the connective tissue attachments is minimized. Furthermore, in times of acute stress, such as a cough or a sneeze, there is a reflex contraction of the pelvic floor musculature, countering and further stabilizing the viscera. The genital hiatus also responds by narrowing to maintain level III support.

With pelvic floor weakness, such as neuropathic injury or mechanical muscular damage, there is loss of the horizontal orientation of the levator plate, the urogenital hiatus opens, and the pelvic floor assumes a more bowl-like configuration. The endopelvic fascia then becomes the primary mechanism of support. Over time, this stress can overcome the endopelvic fascial attachments and result in loss of the normal anatomic position through breaks, stretching, or attenuation of these connective tissue supports. This can result in changes in the vector forces applied to the viscera and may lead to pelvic organ prolapse and/or dysfunction.

URETHRAL CONTINENCE MECHANISM

The urethra is about 3.5 to 4 cm long and averages 6 mm in diameter. Its lumen is slightly curved as it passes from the retropubic space, perforates the perineal membrane, and ends with its external orifice in the vestibule directly above the vaginal opening. Throughout most of its length, the urethra is fused to the anterior vaginal wall.

Histologically, the urethra has four distinct layers: mucosa, submucosa, internal urethral sphincter (smooth muscle), and striated external urethral sphincter. The submucosal layer is highly vascular. These vascular cushions, along with the urethral mucosa, account for approximately one third of the urethral resting tone, while the internal and external urethral sphincters account for the remainder.[24] The internal urethral sphincter is composed primarily of oblique and longitudinal smooth muscle fibers, with a few circularly oriented outer fibers. The precise function of this longitudinal smooth muscle is not known, but Schafer makes a strong argument on biomechanical grounds that these longitudinal fibers serve as "filler volume" within the circular smooth muscle and striated urethral sphincter and that their presence improves the efficiency of the sphincter mechanism by allowing closure of the urethral lumen with only a small amount of circular muscle shortening.[25]

The skeletal muscle component of the urethral sphincter consists of the external urethral sphincter (also called sphincter urethrae) along with the previously described compressor urethrae and urethrovaginalis muscles. These three muscles, which function as a single unit, have been called by Oelrich the *striated urogenital sphincter*.[17] Together, they are approximately 2.5 cm long and encircle the urethra in its mid-portion from just below the bladder neck to the perineal membrane within the deep perineal space. The striated urogenital sphincter provides approximately one third of urethral resting tone and is responsible for the voluntary and reflex increases in intraurethral pressure needed to maintain continence.

Normal urethral function depends upon normal support of the urethra as well as its intrinsic sphincter mechanism. As with vaginal support, dynamic interaction between the levator ani muscle complex and the connective tissue supports of the urethra is essential. The urethra lies on a hammock-like supportive layer composed of periurethral endopelvic fascia and anterior vaginal wall.[26] Increased intra-abdominal pressure, as with a cough or sneeze, causes compression of the urethra against this hammock-like layer, thereby compressing the urethral lumen closed. The stability of the suburethral layer depends on the intact connection of the anterior vaginal wall and its connective tissue attachments to the ATFP and levator ani muscles. These attachments allow the pelvic floor muscle's normal resting tone to maintain the position of the urethra and bladder neck. They are also responsible for the posterior movement of the vesical neck seen at the onset of micturition (when the pelvic floor relaxes) and for the elevation noted when a patient is instructed to arrest her urinary stream.

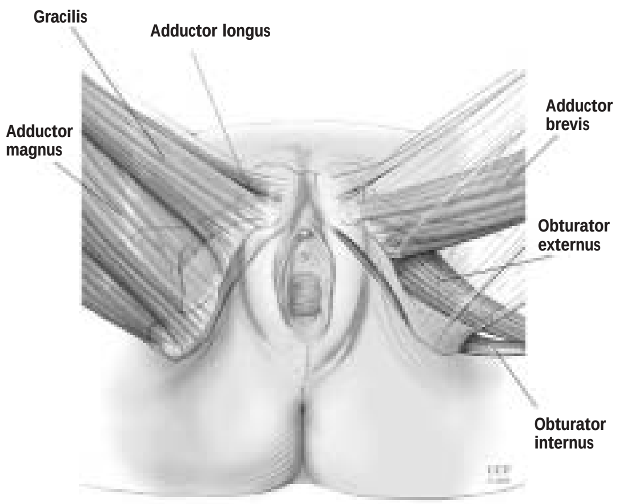

FIGURE 8. Muscles of the obturator compartment. The superficial muscles are illustrated on the left. On the right, the superficial muscles have been made transparent to allow depiction of the deeper muscles.

Defects in these attachments can result in proximal urethral support defects (urethral hypermobility) or anterior vaginal wall prolapse (cystocele), and can contribute to stress urinary incontinence.

OBTURATOR ANATOMY

The obturator *membrane* is a fibrous sheath that spans the obturator *foramen* through which the obturator neurovascular bundle penetrates via the obturator *canal*. The obturator internus muscle lies on the superior (intrapelvic) side of the obturator membrane. The origin of the obturator internus is on the inferior margin of the superior pubic ramus and the pelvic surface of the obturator membrane. Its tendon passes through the lesser sciatic foramen to insert onto the greater trochanter of the femur to laterally rotate the thigh. The obturator artery and vein originate as branches of the internal iliac vessels. As they emerge from the cranial side of the obturator membrane via the obturator canal and enter the obturator space, they divide into many small branches supplying the muscles of the adductor compartment of the thigh.

Recent cadaver work by Whiteside and Walters has contradicted previous reports that the obturator vessels bifurcate into medial and lateral branches.[27] Rather, the vessels are predominantly small (<5 mm in diameter) and splinter into variable courses. The muscles of the medial thigh and adductor compartment are (from superficial to deep): the gracilis, adductor longus, adductor brevis, adductor magnus, obturator externus, and obturator internus (Figure 8).

In contrast to the vessels, the obturator nerve emerges from the obturator membrane and bifurcates into anterior and posterior divisions traveling distally down the thigh to supply the muscles of the adductor compartment. With the patient in the dorsal lithotomy position, the nerves and vessels follow the thigh and course laterally away from the ischiopubic ramus.

CONCLUSIONS

Although human anatomy is unchanging, our understanding of the functional anatomy of the pelvic viscera and the biomechanics of pelvic organ support continues to evolve. Familiarity with the contemporary views of female pelvic organ support is essential as we refine established methods for surgically correcting pelvic organ prolapse or consider adopting new and innovative technologies. The fundamentals reviewed in this article should serve as a useful foundation for the practicing pelvic reconstructive surgeon.

REFERENCES

1. Mattox TF, Lucente V, McIntyre P, Miklos JR, Tomezko J. Abnormal spinal curvature and its relationship to pelvic organ prolapse. Am J Obstet Gynecol 2000; 183:1381–1384.
2. Nguyen JK, Lind LR, Choe JY, McKindsey F, Sinow R, Bhatia NN. Lumbosacral spine and pelvic inlet changes associated with pelvic organ prolapse. Obstet Gynecol 2000; 95:332–336.
3. Sze EH, Kohli N, Miklos JR, Roat T, Karram MM. Computed tomography comparison of bony pelvic dimensions between women with and without genital prolapse. Obstet Gynecol 1999; 93:229–232.
4. Handa VL, Pannu HK, Siddique S, Gutman R, VanRooyen J, Cundiff G. Architectural differences in the bony pelvis of women with and without pelvic floor disorders. Obstet Gynecol 2003; 102:1283–1290.
5. Kearney R, Sawhney R, DeLancey JOL. Levator ani muscle anatomy evaluated by origin-insertion pairs. Obstet Gynecol 2004; 104:168–173.
6. Lawson JO. Pelvic anatomy. I. Pelvic floor muscles. Ann R Coll Surg Engl 1974; 52:244–252.
7. Singh K, Jakab M, Reid WM, Beyer LA, Hoyte L. Three-dimensional assessment of levator ani morphologic features in different grades of prolapse. Am J Obstet Gynecol 2003; 188:910–915.
8. DeLancey JOL, Kearney R, Chou Q, Speights S, Binnu S. The appearance of levator ani muscle abnormalities in magnetic resonance imaging after vaginal delivery. Obstet Gynecol 2003; 101:46–53.
9. Barber MD, Bremer RE, Thor KB, Dolber PC, Kuehl TJ, Coates KW. Innervation of the female levator ani muscles. Am J Obstet Gynecol 2002; 187:64–71.
10. Snooks SJ, Swash M. The innervation of the muscles of continence. Ann R Coll Surg Engl 1986; 68:45–49.
11. Percy JP, Neill ME, Swash M, Parks AG. Electrophysiological study of motor nerve supply of pelvic floor. Lancet 1981; 1:16–17.
12. Pierce LM, Reyes M, Thor KB, et al. Innervation of the levator ani muscles in the female squirrel monkey. Am J Obstet Gynecol 2003; 188:1141–1147.
13. Bremer RE, Barber MD, Coates KW, Dolber PE, Thor KB. Innervation of the levator ani and coccygeus muscles of the female rat. Anat Rec 2003; 275:1031–1041.

14. **Vanderhorst VG, Holstege G.** Organization of lumbosacral motoneuronal cell groups innervating hindlimb, pelvic floor, and axial muscles in the cat. J Comp Neurol 1997; 382:46–76.
15. **Mirilas P, Skandalakis JE.** Urogenital diaphragm: an erroneous concept casting its shadow over the sphincter urethrae and deep perineal space. J Am Coll Surg 2003; 198:279–289.
16. **DeLancey JOL.** Structural anatomy of the posterior pelvic compartment as it relates to rectocele. Am J Obstet Gynecol 1999; 180:815–823.
17. **Oelrich TM.** The striated urogenital sphincter muscle in the female. Anat Rec 1983; 205:223–232.
18. **Funt MI, Thompson JD, Birch H.** Normal vaginal axis. South Med J 1978; 71:1534–1535.
19. **Weber AM, Walters MD.** Anterior vaginal prolapse: review of anatomy and techniques of surgical repair. Obstet Gynecol 1997; 89:331–338.
20. **Boreham MK, Wai CY, Miller RT, Schaffer JI, Word RA.** Morphometric analysis of smooth muscle in the anterior vaginal wall of women with pelvic organ prolapse. Am J Obstet Gynecol 2002; 187:56–73.
21. **DeLancey JOL.** Anatomic aspects of vaginal eversion after hysterectomy. Am J Obstet Gynecol 1992; 166:17–28.
22. **Umek WH, Morgan DM, Ashton-Miller JA, DeLancey JOL.** Quantitative analysis of uterosacral ligament origin and insertion points by magnetic resonance imaging. Obstet Gynecol 2004; 103:447–451.
23. **Leffler KS, Thompson JR, Cundiff GW, Buller JL, Burrows LJ, Schön Ybarra MA.** Attachment of the rectovaginal septum to the pelvic sidewall. Am J Obstet Gynecol 2001; 185:41–43.
24. **Bump RC, Friedman CI, Copeland WE.** Non-neuromuscular determinants of intraluminal urethral pressure in the female baboon: relative importance of vascular and nonvascular factors. J Urol 1988; 139:162–164.
25. **Schafer W.** Some biomechanical aspects of continence function. Scand J Urol Nephrol Suppl 2001; 207:44–60.
26. **DeLancey JO.** Structural support of the urethra as it relates to stress urinary incontinence: the hammock hypothesis. Am J Obstet Gynecol 1994; 170:1713–1723.
27. **Whiteside JL, Walters MD.** Anatomy of the obturator region: relations to a transobturator sling. Int Urogynecol J 2004; 15:223–226.

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Plastic fantastic: Sex robots and/as sexual fantasy

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Abstract
This article provides an interdisciplinary and intersectional analysis of sex robots and/as sexual fantasy. I demonstrate that sexual fantasy is a highly complex and salient vector of analysis for any discussion of love and sex with robots. First, I introduce contemporary North American sex robots and offer a brief sketch of their ontology as relates to sex toys and pornography. Next, I provide a short but instructive mapping of sexual fantasy scholarship from across the fields of experimental psychology, media and cultural studies, post-colonial, psychoanalytic, feminist, queer and critical race theory. My goal here is to demonstrate sexual fantasy's polymorphous and productive nature and its complex relationship to reality. Drawing on the theories of sexual fantasy canvassed herein, I examine the role of fantasy to sex robots' inception, marketing, and consumption. From here I offer an appraisal of radical feminist, new materialist, and disabled queer and trans feminists' critiques of sex robots and their users. I argue that theorizing sex robots through the lens(es) of sexual fantasy is necessary given efforts to stigmatize, regulate, and criminalize sexual fantasy and sextech users in the post/digital age. Future scholarship is encouraged to further examine the sex robot/sexual fantasy nexus and to consider whether and how their intersections impede or facilitate the development of alternative "networks of affection" including those that lie between the platonic and romantic or between "carbonsexuality" and technosexuality/digisexuality.

Keywords
sex robot, sexual fantasy, sextech, intersectional, digisexuality

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Introduction

I have yet to experience an actual sex robot, but I am already enamoured. Literature has brought me here—Philip K. Dick's classic, *Do Androids Dream of Electric Sheep* (1968); Samantha Hunt's short story, *Love Machine* (2017); Jeanette Winterson's *Frankissstein* (2019). These are just a few of the narratives that have seduced me while simultaneously exposing humanity's anxieties about the slow march from private orgasm—*la petite mort*—to robopocalypse—our moral and physical annihilation. No longer restricted to the mind, the page, or the screen, sex robot scholars have argued that "[a]dvances in the fields of artificial intelligence, biomechanics, robotics, and animatronics have…caus[ed] a fundamental shift of the narrative from the imaginary to the tangible, from fiction to facticity" (Kubes, 2019b: 1). This article conceptualizes sex robots at the intersections of these categories; as "tangible imaginary," as "factitious fiction," or, as I refer to them here, as "manifest fantasy." Given that sex robots' relationship to sexual fantasy is often ignored or relatively undertheorized in the existing literature (Döring et al., 2020), this article demonstrates that sexual fantasy is a highly complex and salient vector of analysis for any discussion of love and sex with robots (Levy, 2007).

This article proceeds in four parts. First, I introduce contemporary North American sex robots and offer a brief sketch of their ontology as relates to pornography and sex toys.[1] Next, I provide a short but instructive mapping of sexual fantasy scholarship from across the fields of experimental psychology, media and cultural studies, post-colonial, psychoanalytic, feminist, queer and critical race theory. My goal here is to demonstrate sexual fantasy's polymorphous and productive nature and its complex relationship to reality. Drawing on the theories of sexual fantasy canvassed herein, I examine the role of fantasy to sex robots' inception, marketing, and consumption. From here I offer an appraisal of radical feminist, new materialist, and disabled queer and trans feminists' critiques of sex robots and their users. Ultimately, I argue that a more affirmative and optimistic assessment of sex robots and their users is possible, and that theorizing sex robot through the lens(es) of sexual fantasy is necessary given efforts to stigmatize, regulate, and criminalize sextech users and sexual fantasy in the post/digital age. Future scholarship is encouraged to further examine the sex robots/sexual fantasy nexus and to consider whether and how their intersections impede or facilitate the development of alternative "networks of affection" (Puig, 2019) and "alterous sexualities" (Hearn, 2018)—including those that lie between the platonic and romantic, or between what I call "carbon-sexuality"—a sexual preference for organic humans—and technosexuality/digisexuality—the attraction to, veneration, and use of technology for sexual and intimate purposes (Bardzell and Bardzell, 2016; McArthur and Twist, 2017).

Sex robots in 2021: notes on ontology and anxiety

Sex robots are defined here as human-looking, anatomically correct doll-robot hybrids that interact with their users via the integration of sensors and artificial intelligence (AI). Key here are the RealDoll^{X} models designed by Realbotix and commercially available by US manufacturer Abyss Creations/RealDoll. Conceptualized as "a low-cost embodied, highly customizable, infinitely patient human-scale personal companion" (Coursey et al., 2019: 86), these first generation dollbots sport an android head that is capable of "eye and facial contour for speech and emotive expression" (Coursey et al., 2019: 85); a silicone body; a "conversational system…designed to address mature topics" (Coursey et al., 2019: 78); and an xMode application that links users to their robots and allows them to choose a desired voice, personality type, and provide a degree of machine learning about the user's interests and preferences (RealDoll HarmonyX, n.d). As with RealDolls' silicone sex dolls, the RealDoll^{X} models are expanding in range and popularity. Harmony, the company's original sex doll and now its first sex robot (Harmony^{X}), is visually young, white European/North American, with freckled skin; full pink lips; blue eyes; petite facial features; straight long blond hair; very large breasts; very small waist; flat stomach; and long hairless legs devoid of veins or cellulite. Solana^{X}, her new and darker "sister," is readable as Spanish/South American (based in part on the origins of her name). She shares a similar body type to Harmony^{X} but is slightly darker in skin tone with a wider nose, long dark straight hair, dark wine-red lips, and darker nipples. Readable as the exoticized and racialized "Other," Solana's tan skin and blue eyes nevertheless mark her as falling within "gradations of whiteness" (Dyer, 1997: 12). The same can be said of the three newest models—Nova, Tonya, and Serenity—all of which are advertised as light skinned, if not white, with customizable hair, eye color; breast size, nipple and labia shape, and pubic hair.

Sometimes classified as smart sex toys (Scheutz and Arnold, 2016; Wiseman, 2015), sex robots are also distinguished from sex toys based on their fully embodied, hyper-realistic, and relatively interactive humanistic form (Chatterjee, 2020; Devlin, 2018). While some suggest that sex robots' life-size and embodied elements facilitate intimacy and emotional attachments beyond that which is typically experienced with disembodied sexual aids (Carpenter, 2017; Levy, 2007), others suggest that the process of anthropomorphizing is not limited to sexbots (Darling 2016). As roboticist Kate Darling argues, "[T]he human form is overrated and overused. We can put emotions into everything from blobs to chairs" (Corbyn, 2021). To the extent that sex robots are conceptualized as sex toys, there is reason to believe that they may democratize the sex toy market by further destigmatizing sex toys for men much as sex toys have been for women (Comella, 2017).

For many, however, sex robots' gendered and racialized humanistic form, as well as their pornified esthetics, invoke concerns directly out of the feminist sex wars playbook (Bracewell, 2016; Duggan and Hunter, 2006)—namely fears that sex robots stand in for and objectify all women, eroticize social domination, and normalize and promote sexual violence—thus, mirroring radical feminists' concerns about pornography, prostitution, and S/M fantasy play. For instance, UK ethicist and self-proclaimed radical feminist Kathleen Richardson established the Campaign Against Sex Robots (CASR) based, in part, on the supposition that sexbots reinforce "'prostitute-john' [relations]…justify the use of women and children as sex objects, [and] corrode human empathy" (Klein and Lin, 2018: 111). More recently CARS has changed its name to the Campaign against Porn Robots (CAPR) because, according to Richardson, "They're pornbots, they're actually pornography. What the dolls are actually mimicking are the women in pornography. They're a version, from this masculinist, male patriarchal point of view, a very degraded view of women, reduced…to a form with penetrable holes that can be sold off and commercialized and circulated among men" (Campaign Against Sex Robots, n.d). And yet, what little we know about sex doll and robot consumers at this point indicates that for them the fantasy of intimacy with a "brought to life-partner"—via doll personalization, modifications, online textual narratives and shared photographic poses—creates an "embodied intimate fiction" (Su et al., 2019: 28) that may distinguish their experiences from those between porn consumers and the porn stars they idolize (Coursey et al., 2019; Jackson et al., 2019).

While sex toys' and pornography's relationships to sexual fantasy has met with sustained scholarly inquiry, apart from the few sources discussed below the same cannot be said of sex robots and their users. What research does exist favors psychological and psychoanalytic analyses of sexual fantasy's perils. The following section thus presents a circumscribed interdisciplinary and intersectional mapping of sexual fantasy's complex ontology, affects, and effects, before offering an appraisal of sexual fantasy's significance to the design, marketing, consumption of sex robots, and to scholarly analyses of both dollbots and their users.

Sexual fantasy across disciplines

In the service of theorizing sex robots as sexual fantasy this section reviews sexual fantasy's vicissitudes. Referencing theories from across the fields of experimental psychology, cultural and porn studies, post-colonial, critical race feminist, and queer-of-color theory, it provides a snapshot of sexual fantasy as simultaneously conscious and uninhibited; unconscious and repressed; as private and as public; as a/political; as individual and as collectively experienced and enacted; as produced by, and productive of, social relations; and as a mode of oppression and resistance. In doing so, it demonstrates sexual fantasy's myriad manifestations and its complex relationship to reality.

Sexual fantasy as individual and conscious

Sexual fantasy is commonly understood as an individualistic and conscious practice that is distinct from reality (Ing, 2020; Neuman, 2014). From within the positivist field of experimental psychology, sexual fantasy is described as "deliberate patterns of thought" which "can be generated by, and generative of, sexual arousal; a product of our vast imaginary capabilities and/or triggered by something we read or see"; as well as an "integral part of everyday human existence, with clinical and social significance" (Leitenberg and Henning, 1995: 492). Psychologist regularly ask: how many people have fantasies?; who has them?; when do they have them?; as well as, what their fantasies are comprised of and whether a relationship exists between fantasies, sexual behavior, and sexual offending (Leitenberg and Henning, 1995). Findings are often distinguished along cis-gendered male/female lines often with little explicit intersectional analysis or reflection on the heteronormative, cis-normative, and racial dynamics at play in individual studies or in the discipline of psychology more broadly (Barker, 2007; Riggs, 2007; Roberts et al., 2020). What emerges are limited yet instructive studies about rates, types and the gendered dimensions of individuals' sexual fantasies. Work from within this discipline suggests that (cis-gender, mostly white, and heterosexual) men and women have sexual fantasies at an approximately equal rates yet men appear to fantasize about sex more often throughout the day (Leitenberg and Henning, 1995: 473); men report a higher diversity of sexual fantasies than women (Joyal et al., 2015); women imagine having something sexual done to them whereas men imagine doing something sexual to their partner; and men have more explicit and visual imagery in their fantasies as opposed to women who conjure more emotional and romantic imagery (Joyal et al., 2015: 337).

Central to psychological analyses of sexual fantasy are concerns with paraphilia and the distinction between normal/abnormal and typical/unusual fantasies. Here, however, studies suggest that very few fantasies are statistically rare or unusual and that the field should be careful before labeling a sexual fantasy as unusual, let alone deviant. Rather than focus on the content of fantasies, Joyal and colleagues suggest that the emphasis should be "more on pathological aspects such as rigidity and necessity of certain sexual fantasies" (Joyal et al., 2015: 335–336). While evidence exists to support the finding that sexual offender have sexually arousing fantasies about sexual offences and masturbate to these fantasies, this association does not necessarily mean that the fantasy caused the behavior any more than the behavior caused the fantasy, and that "the evidence is mixed as to which occurs first, fantasy or behavior" (Leitenberg and Henning, 1995: 487). One's fantasies do not necessarily indicate a desire to experience the fantasy "in reality," a conclusion that is evidenced by individuals' enjoyment of rape fantasies and their unwillingness to actually rape/be raped (Bivona and Critelli, 2009).

Sexual fantasy and the collective un/conscious

In addition to psychology's analysis of sexual fantasy as relatively individualized, conscious, common, and healthy to the extent that it is distinct from wish-fulfillment, sexual fantasy has also been theorized by psychoanalyst, cultural studies, and feminist scholars as culturally produced and as productive, thus complicating the boundary between fantasy and reality. Given that the scope of scholarship across this realm is too broad to do justice to, this section limits its focus to a few theories of the "problem" of sexual fantasy. Key here is critical race and post-colonial psychoanalytic scholar Franz Fanon's argument that the origins of colonialism and the racialized Other can be traced to the colonizer's repudiated and repressed sexual fantasies about the Negro's genital potency—what Tamari Kitossa calls "the Black Phallic Fantastic" (Kitossa, 2021). For Fanon, this myth is not merely an image in mind of the colonizer, but rather one that is faithfully reproduced in and imposed by public rhetoric and discursive and semiotic representational texts—from children's books to theater, film, and beyond (Fanon, 1952: 169). Together these fantasies and cultural impositions structure and constrain the collective un/conscious—how the colonizer and colonized come to know themselves, their belonging and value, in history and society (Fanon, 1952: 191).

Sexual fantasy's impositions and constraints have also long underpinned Post/Freudian, psychoanalytic, and feminist theories of sexual fantasy. Having canvassed this body of literature and findings from his joint study of peoples' engagement with online pornography (with Clarissa Smith and Feona Attwood), cultural studies scholar Martin Barker offers two key insights. First, that sexual fantasy is primarily viewed amongst the psychoanalytic and feminist literature as singular and wild; as at best of limited value and at worst as “adolescent, deficient, and dangerous” and in need of “careful management” (Barker, 2014: 148). Second, that while fantasy plays a central role in pornography’s consumption, fantasy is “varied and multiform [in] purpose” (144) and serves people in a number of different ways (2014: 155). In keeping with Fanon, Barker dismisses the claim that one can lose the distinction between fantasy and reality, suggesting that this distinction is itself nonsensical because fantasy exists at the intersections of one’s sense of self, between bodies, and amidst social and cultural norms with myriad private and social affects and effects. However, unlike Fanon, Barker suggests that fantasy’s plurality and productivity means it is equally capable of being used “exploitatively and hurtfully” or “constructively, to explore and build sexual relations of great power and pleasure” (Barker, 2014: 155).

Sexual fantasy at the intersections

Amidst this anxiety and optimism about sexual fantasy arise questions about whether and how we ought to, or can, decolonize our sexual psyches, thus, unchaining our fantasies, desires, and selves from what Juana María Rodríguez calls “the oppressive pornographic narratives of racist patriarchy” (Rodriguez, 2011: 337). Drawing on Judith Butler’s idea of the “critical promise of fantasy”—fantasy’s ability to “challenge the contingent limits of what will and will not be called reality,” thus enabling us “to imagine ourselves and others otherwise” (Butler, 2004: 29)—Rodríguez outlines a “sexual fantasy remix” wherein “racialized women and the disabled, along with indigenous populations, slave societies, immigrant groups, welfare recipients, prisoners, gender-queer subjects, and other bodies marked as deviant…stare into the face of racialized erotics and pain in a gesture of critique and imagination that attempts to unravel both individual subjectivity and the existing social relations that surround us” (Rodríguez, 2011: 343). Fantasy’s critical promise is thus offered as a means of conjuring a queer anti-supremacist sociality. In contrast to Fanon’s rejection of a politics of recognition as a way out of abjection and hurt (given that this recognition rests on the “elevation” of the Black subject to the already racialized as white idea of the human), Rodríguez advocates on behalf of recognition, and the social bonds it may create. “Through our real and imagined sexual encounters,” Rodriguez writes, “queers enact the possibility of disentangling bodies and acts from preassigned meanings, of creating meaning and pleasure anew from the recycled scraps of dominant cultures…[and] of remarking and remaking the pain and refusal of social intelligibility that constitute our daily lives” (2011: 338).

A similar “sexual fantasy remix” is advanced in Ariane Cruz’s analysis of Black women’s sadomasochistic race play—wherein black women and white men (among other interracial configurations) sometimes serve as slaves to white men’s plantation fantasies. Drawing on interviews with Black female practitioners of race play, Cruz concludes that the journey into racialized sexual fantasies is as much about “working out and through a Black female (un)consciousness haunted by a history of sexual violence” as it is about "innovating fresh modes of accessing pleasure" (Cruz, 2015: 434–435). The elaborate "play of race" she argues, demonstrates the "fragile yet formidable boundaries between the constructs of fantasy/reality, inside/outside, mind/body, and Black/white" (Cruz, 2015: 435). Thus, both Rodríguez and Cruz demonstrate, "*just how permeable, nonetheless vital, the line between fantasy and reality is*" (Cruz, 2015: 428. Emphasis added), as well as the opportunities sexual fantasies provide for imagining, negotiating and creating alternative sets of social and sexual relations.

Sex robots and/as manifest sexual fantasy

Taken together, the above theories of sexual fantasy establish that sexual fantasy must be understood as "a complex realm of subterfuges and satisfactions as well as terrors" (Cowie, 1992: 150). And yet, sexual fantasy remains an undertheorized aspect of sex robot debates. Where sexual fantasy is acknowledged, terror reins. This section analyses how sexual fantasy informs the design, marketing, and consumption of sex robots, and argues that a more affirmative and optimistic assessment of seemingly normative sex robots, users, and their fantasies, is possible. Moreover, I suggest that such an analysis is necessitated by emerging efforts to stigmatize, regulate, and criminalize both sex robot users and sexual fantasy in the post/digital age.

Plastic fantastic: origin stories and sales pitches

According to Matt McMullen (artist, sculptor, founder, and CEO of RealDoll and Realbotix) and Dr. Kino Coursey (computer scientist and AI/VR designer at Realbotix), sexual fantasy played no conscious role in McMullen's creation of the human figures that would become Harmony and later the Model^{x} line of dollbots. Rather, McMullen had set out to create a "fashion mannequin that could pass a 'fast visual Turing test,' in that at a glance an unobservant observer might not notice that the mannequin was not human" (Coursey et al., 2019: 79). Department stores, however, expressed little interest in McMullen's tall, skinny, poseable creations. Only after he received, and dismissed, inquiries about his dolls' anatomical correctness did he begin seriously considering requests for shorter and curvier "sex capable" options. As an artist, McMullen felt compelled to create products that satisfied both his clients' requirements and his own aesthetic tastes (as any artist would) (McMullen, personal communication, 2022). While he may have tapped into his own fantasies when hand producing each doll, given that each figure took 3–6 months to complete and was costly to produce, ultimately consumer demand, the fragility and weight of his materials,[2] and the need for a sustainable business model dictated the dolls' final form (McMullen, personal communication, 2022), not, as some might assume, an explicit effort to materialize and objectify hegemonic sexual fantasies.

Despite this origin story, RealDoll's name and its tag lines explicitly reference sexual fantasy, at times distinguishing fantasy from reality and at other times collapsing the two into one another. For example, at the time of writing, RealDolls' website invited its browsers to "Dream your wildest fantasy into reality," but also to "Get Real. Nothing beats the real thing" (RealDoll, n.d). While the first tag line (Dream your wildest fantasy into reality) reinforces a clear distinction between fantasy and reality, the second (Get Real. Nothing beats the real thing) blurs these boundaries. For instance, getting "the real thing" can be interpreted as both "the best dollbot on the market" (as opposed to a knock-off), and a "real" (read cis-female) woman,[3] or at least the feeling of sex with one. Indeed, by replacing "purchase" or "buy" with "get," RealDoll facilitates the fantasy of "scoring" a hot date—based on one's inherent talents or charm—rather than on purchasing sex—which is often linked to one's buying power and presumed lack of sexual appeal. At the same time, the tagline calls for consumers to "get real." While this can be interpreted as a literal demand to "acquire a RealDoll," used colloquially, "get real" is an idiom that implies the need to "confront reality, to realize something seriously, stop daydreaming and face the truth," and "give up artifices" (Get Real, n.d). As such, "get real" tacitly reinforces the fantastical nature of the transaction, reminding the potential consumer that a RealDoll might be their best option given how unrealistic it is that they can "get" a human woman that is as hot as one of their robots and who will "do" what a RealDoll can do for them. A similar double move is facilitated by the company's combination of "real" and "doll" in its name. Originally old slang for "sweetheart, mistress, paramour," the term "doll" shifted in the 1770s to describe "a child's toy baby" before transferring back, in 1778, "to living beings…in the sense of 'pretty, silly woman'" and then, by the mid-20th century, to "an endearing or patronizing name for a young woman" (Online Etymology Dictionary, n.d). The "doll" in RealDoll thus refers to both an objectified subject and a subjectified object. Combining Real and Doll thus serves as a sort of perlocutionary act, one meant to help convince the consumer they are fulfilling their fantasy of realizing both an inanimate plaything and an animated lover.

Sex and sexual fantasy simultaneously drive and take a back seat to the development of the Model^X line. According to McMullen, Realbotix's design team[4] started by animating Harmony^X's face to add personality and expression "rather than focusing on sexual gyrations" because she "is more about companionship than sex" (Bartneck and McMullen, 2018). At the same time, each unit is equipped with an interactive interface module, animation, and magnetics that allow users to attach different faces to the same underlying mechanism thus facilitating personalization "for various genders and fictional species" (Coursey et al., 2019: 84), a design detail that aligns with effort to facilitate sexual fantasies involving mythical creatures and fictional characters.[5]

Perilous plastic fantasies?

Sexual fantasy also appears, to varying degrees, in both mainstream and scholarly analyses of sex robots. Media sources from across the political spectrum refer to sex robots as embodying and facilitating primarily normative and "deviant" fantasies, including fantasies about "up for anything" sexual partners (Gibson, 2016), threesomes (CBC Radio, 2017), and, more frequently fantasies of sexual domination, submission, and rape (Cheung, 2022; Ghosh, 2020; Knapton, 2017). Interestingly, the fantasy of "sex with a robot" is rarely explicitly acknowledged. Here, sex robots are sometimes referred to as a "technology driven by male masturbatory fantasies" (Moore, 2017), with some suggesting that "Cyborg sex…more than likely foretells the sad future of erotic phantasy and the further disciplining of sexual pleasure" (Rosen, 2017). Within academic scholarship, Allison de Fren's analysis of ASFR (alt.sex.fetish.robots)—an internet fetish community centered on fantasies of robotic women—emerges as one of the first works to engage more closely with fantasy for RealDoll owners. As de Fren writes, amongst the community there is an acknowledgment of the tension between the fantasy of eternal life and beauty and concerns about the "programmatic control [and use]…of a human object" (De Fren, 2009: 409). As such, ASFRians are sensitive to the interpretation of A.S.F.R. "as a technological elaboration of standard BDSM (bondage-domination-sado-masochism) fantasies, in which one person dominates another for sexual pleasure" as well as "the perception that it represents the reification of normative gender ideals" (De Fren, 2009: 409). According to the ASFRians de Fren spoke with, these assumptions "keeps its members highly closeted in comparison to fetishists like the Furries and the Plushies (those who eroticize anthropomorphic and stuffed animals and animal costumes, respectively) [and] who hold dozens of public conventions each year throughout the world" (2009: 409). Indeed, ASFRians were "so concerned about the accusation of sadism or misogyny that they have coined a mantra or tagline, oft repeated on their websites: 'ASFR is not about the objectification of women, it's about the feminization of objects'" (2009: 409), an assertion that has largely been ignored or dismissed by anti-sex robot activists and scholars.

In the decade since de Fren conducted her research, techno/digisexuality and the use of sex robots has come to be known by the mainstream (Hart, 2020; McGowan, 2019), prompting the Campaign Against Porn Robots' founder, Kathleen Richardson, to ask—"[W]here do the fantasy images and products come from? Is fantasy just a neutral domain that is a sphere separated off from the 'real' and therefore unproblematic?" Answering her own question she claims that "fantasy, and the ways that robots are seen show human relations at work"; they "tell us about gender, power, inequalities, race and class" (Richardson, 2016: 292). From here Richardson concludes that sex robots are the product of rape culture, that they facilitate rape fantasies, and embody fantasies about the perfect, passive, plaything thus resulting in the abuse and rape of real women (Gutiu, 2016; Richardson, 6/2016a), a conclusion that much of the sexual fantasy research cited above complicates and even contradicts.

For Richardson, the vital if porous line between fantasy and reality, and the possibility that sex robots may be generative of new sexual intimacies and realities is rejected wholesale. Richardson's radical feminist critiques have since been nuanced by new materialist feminist and disabled queer/trans scholars. Concerned that sex robots look and behave "like a pornographer's phantasy come true" (Moran, 2019: 60), and are aimed at fulfilling "individualistic forms of satisfaction catered to meet the needs/fantasies of cis-straight people (white men mostly)" (Puig, 2019: n.p.), these scholars decenter gender oppression and robot abolitionism and instead offer intersectional responses aimed at problematizing the anthropocentric and "biocentric" nature of humanistic sex robots; their (purported) manifestation of white supremacist and colonialist fantasies about racial, gendered, and sexual superiority; and, their endorsement of "hierarchical and exclusionary understandings of familial, romantic, platonic, erotic, and sexual relationships," (Kubes, 2019a, 2019b; Moran, 2019; Puig, 2019). For instance, Jenny Moran draws on Fanon and Achille Mbembe to argue that the racialized AI personalities of the now non-existent TrueCompanion sex robot—namely the Arabic named “Frigid Farah” (who presumably does not consent) and Japanese named “Young Yoko” (who presumably cannot consent)—“necropolitically racialise their AI’s performance of consent by assigning rapeability to subjects upon whom non-Westernness is (incorrectly) ascribed” (2019: 42). Moran thus interpolates users who simulate rape using Young Yoko or Frigid Farah personalities as having internalized colonial and racist messages and as perpetuating “necropolitical rape culture” thus “strengthen[ing] discriminatory practices which oppress marginalized Peoples” (Moran, 2019: 43). Drawing instead on Crip and trans theory, Krizia Puig makes similar connections between contemporary sex robots and genocidal social death. Referencing the erasure of nonnormative “bodymindspirits” from the “imagining, theorizing/experimenting, and producing [of] sex tech” (2019: 502) as well as sex robots’ hypernormative and cishetero “humanistic affective logics of time, space, and relationality” (2019: 510), Puig concludes that contemporary sex robots constitute a form of emotional genocide; “Not our bodies, nor our fantasies or hopes—not the ways we love and grieve, nor our joy or our pain are considered within most projects of future-making” (2019: 510).

Both Moran and Puig’s engagement with critical race, post-colonial, Crip, queer and trans theory offer analyses of sex robots that go beyond single-axis critiques that emphasize gender oppression or, as Jennifer Nash argues with respect to anti-porn feminists, that merely mobilize race as a peripheral “intensifier” to help bolster arguments that pornography is not “just fantasy” thus helping to “secure [feminists’] claims to pornography’s harms” (2014: 10). Considered in relation to Fanon’s political theory of fantasy referenced above, as well as to technology and cultural studies’ analyses of the intersections of gender, sexuality, race, representation, and tech (See Chun, 2009; Hall, 1997; Wajcman, 2007), these authors raise legitimate concerns about sex robots as semiotic texts with complex relationships to social relations. Nevertheless, missing from these works is an attentiveness to sexual fantasy’s vicissitudes and affordances. As such, these works offer “paranoid readings”—that is, readings which “represent *a* way, among other ways, of seeking, finding, and organizing knowledge” (Sedgwick, 2003: 126). Given the complex nature, affects, and effects of sexual fantasy, it begs considering whether and how sex robots’ manifestation of seemingly hypernormative fantasies and their facilitation of ostensibly “deviant” sexual fantasies may in fact invite and extend “new bodily and erotic relations” (Karaian, 2019: 820), particularly given, as Sedgwick notes, the “many ways selves and communities succeed in extracting sustenance from the objects of a culture—even of a culture whose avowed desire has often been not to sustain them” (2003: 150–151).

In this context calls to develop sex robots from “a gender-queer perspective” (Kubes, 2019b: 14) arise, thus mimicking sex radical, sex positive, critical race, and queer calls for the transformation of the pornography industry; including calls for the proliferation of non-standard bodies, sexualities, scenarios, improved working conditions, and a broader set of (satisfied) consumers (DeGenevieve, 2014). While such reforms have changed the pornography industry for the better (Taormino, 2013), they have also resulted in questions about the desirability of sanitizing and rendering sexual fantasy "politically correct" in all contexts (Nguyen, 2014). For instance, referencing Hoang Tan Nguyen, Rodríguez posits that for the historically sexually deviantized, racialized sexual fantasies may present "an occasion to stare into the face of racialized erotics and pain in a gesture of critique and imagination that attempts to unravel both individual subjectivity and the existing social relations that surround us" (2011: 343). She goes on to suggest that "To deny our fantasies because they are too complicated, too painful, or too perverse, to erase their presence or censor their articulation in public life, constitutes a particular kind of insidious violence that threatens to undermine our ability to explore the contours of our psychic lives, and the imaginary possibilities of the social worlds in which we exist" (Rodríguez, 2011: 343). Of course, critical race scholars such as Rodríguez, Cruz, Nguyen, and Nash develop theories of the revolutionary potential of sexual fantasy within the realm of racialized pornography and sadomasochistic play from the perspectives of the most deviantized sexual subjects—namely racialized, queer, trans, and disable women. The question then becomes whether the utopian potential of sexual fantasy is restricted to certain abjected subjectivities and scenarios, and whether normative seeming sex robot users and their fantasies can be understood in more benign or even more positive terms than are currently available. To begin to answer this requires more insights about sex robot consumers.

Silicone users and abusers?

To a degree, the assumption that sex doll and robot users are a relatively privileged group, not the sexual subjects who have historically been socially and psychically abjected, dominated, and "punished most viciously for seeking out the pleasures of perverse sexual license" (Rodriguez, 2011: 336), is correct. Despite the growing number of people who fantasize about and express a willingness to have sex with robots (Lehmiller, 2018; Rajnerowicz, 2021), approximately 80% of sex doll owners are a majority cis-gender, white, men (Su et al., 2019), with a degree of financial privilege (given the high cost of realistic sex dolls and doll-bots), while 20% are couples and females (Döring et al., 2020: 13). Emerging research on sex doll users suggests that while a minority of consumers are "Men Going Their Own Way" men's rights activists, the majority of users reject misogynistic views of women as well as heterosexual and monogamous constraints placed upon their sexual and intimate needs (Hanson, 2021).

Extrapolating further from existing sex doll literature, these men are privileged in that they are no more lonely, desperate, or socially inept than those in the general US population (Szczuka and Krämer, 2017), nor do they exhibit significantly higher rates of mental-illness (Valverde, 2012). Any attempts to condemn them based on the assumption that male use of sexual objects deviates from "statistical sexual norms" (Szczuka and Krämer, 2017: 4) or that users are "fetishists" (De Fren, 2009; Valverde, 2012) ignores the fact that both object fetishism ("sexual arousal from the erotic use of inanimate, nonliving objects") (Rees and Garcia, 2017) and men's use of flesh lights (Lampen, 2017) and vibrators (Reece et al., 2009) is relatively common and positively experienced within the North American context. Although sex doll users have been found to experience "above-average problems with sexual functioning" (Valverde, 2012: 30), this is arguable a normative evaluation that reifies the primacy of the ejaculatory penis above other organs, acts, pleasures, and intimacies, and ignores the growing destigmatization and usage of "erectile dysfunction" drug for medical and recreational purposes (Marsh and readers, 2017).

Notwithstanding their privileges, these men are also deviantized and marginalized in mainstream narratives (Borenstein and Arkin, 2019; Di Nucci, 2017), where they are regularly depicted as deprived victim-loners (CBC News, 2019), sicko "creeps" (Tiehen, 2018); pervy "johns" (Amin, 2019; Comella, 2018), and pre-criminals (Douthat, 2018). Although the source of their abjection is multifaceted, evidence suggests that this abjection flows, in large part, from the explicit parallels drawn between them and rapists, porn consumers, and sex work clients. That is, to the extent that sex robots are understood as commercialized manifest fantasy and as a means of playing out (common) S/M and rape fantasies, the men who consume them have been framed as users and abusers; as perpetrators of rape culture, as yet another source or symptom of a pornographic "public health crisis" (Blunt and Stardust, 2021); and/or as "unworthy" clients of commercial sex (Pheterson, 1993) who must be shamed, stigmatized, and criminalized (Weitzer, 2018).

In this context it is worth considering whether sex robot consumers can be understood as deviantized or even as queer sexual subjects in the same way some have suggested that "deviantized" sex work clients should be theorized (Khan, 2019). Indeed, additional support for the queerness and homosociality of sex robot users is evidenced by emerging analyses of male sex doll users and communities (Burr-Miller and Aoki, 2013; Middleweek, 2021; Su et al., 2019), as well as within the personal narratives of female sex robot consumers such as that of queer artist Amber Hawk Swanson. For instance, grappling with her difficulty finding a female partner, Hawk Swanson found herself admiring, sympathizing, and identifying with the online community of "doll husbands"—men who owned and loved their own RealDolls—and in 2006 commissioned a life-size RealDoll (not a robot) in her own image. Of her art, Getsy writes that Hawk Swanson disrupts "clichéd (heterosexual) fantasies of lesbian desire and of twin sexuality, both of which repeatedly surface as erotic ideals in popular culture as well as mainstream pornography" (2013: 469) while *also* complicating the boundary between "victimizing owner and victimized image" thus exposing "the anxious interdependence of self-objectification and self-realization" (2013: 474 and 475). Hawk Swanson's subsequent conversations with doll users in her collection entitled *Doll Closet* (2017), draws on the closet metaphor to signify the stigmatization that keeps doll owners hidden, while also acknowledging the closet as a necessary space for sex doll/bots that must be hung to avoid being damaged. Of the iDollators she speaks with at least one is racialized—the internationally known Davecat—whereas others gender-bend and express their own heterosexual desires alongside a disidentification with heteronormativity. To this resource we can add the growing body of media coverage that exposes sex doll users as running the gamut from heterosexual married couples, to interracial poly couples and single queer men (Beck, 2013; Pemberton, 2020). Taken together with qualitative analysis of male users of a major sex doll forums, it thus begs considering how, "in the absence of empirical research otherwise, we need not presuppose that human–sex robot relationships will increase hegemonic or toxic forms of masculinity" and whether "these new relationship configurations may usher in new identities, communities or “liberated forms of sexuality” that enhance our lives with novel forms of mechanized pleasure” (Middleweek, 2021: 383). To the extent that emerging studies of sex dollbot and their users help to reveal the “myth of a natural, monolithic heterosexuality… [and the] capriciousness of its logic” (Burr-Miller and Aoki, 2013: 386), it becomes possible to view the idea of the “hegemonic sex robot user” as itself a fantasy[6] and to question the construction of sex robot consumers as singularly privileged male users and abusers with oppressive sexual fantasies.

Conclusion

Scholarly analyses of sex robots’ relationship to sexual fantasy are rare (Döring et al., 2020). In those instances, where sexual fantasy is considered it is overwhelmingly condemned as “too normative” or “too deviant”; as mimetic of, and a means of reifying structural oppression; and, as in need of aesthetic reformation, sanitization, and regulation. Yet, as the above interdisciplinary mapping and analysis of sex robots and/as sexual fantasy reveals, the fantasy/reality binary is concurrently fact and fiction. Sexual fantasy is polymorphous in form and multifarious in effects; it is simultaneously intangible narrative, manifest object, productive practice. Both reverie and reality, sexual fantasy is generative of private ecstasies, public injuries, and vice versa. Nevertheless, acknowledging the co-constitution and interdependence of fantasy and reality does not preclude their ability to be cleaved apart. It is possible, indeed necessary, “to maintain fantasy as fantasy, not allowing it to become the basis for social norms” (Cowie, 1992: 23) or the foundation for legal regulation. As is demonstrated here, the lack of a sustained and nuanced analysis of sexual fantasy’s relevance to the design, marketing, and use of sex robots has contributed to the disintegrative shaming, surveillance, and governance of both sex robots and their users. In addition to public and scholarly opprobrium discussed above, Canada and the US have sought to criminalize some sex doll-robot users via the creation of new legal frameworks (Tiehen, 2018), the application of child pornography offences (Payette, 2017), and the creative interpretation of municipal bylaws that prevent the operation of sex doll “brothels” (Amin, 2019; Comella, 2018). In this context, asserting, as some have, that sex robots and their users *exclusively* manifest oppressive and violent hetero-patriarchal and racist sexual fantasies that “spill over into the real world” (Danaher, 2019: 564) overemphasizes the “presumptions…[of] representational realism that conflates the signified of fantasy with its (impossible) referent and construes ‘depiction’ as an injurious act and, in legal terms, a discriminatory action or ‘real’-effect” (Butler 1990: 106). Such a conflation, although rooted in important analyses of the complex interdependence of fantasy and reality, denies the very real possibility of maintaining the two as distinct realms. Failing to acknowledge this is troubling, particularly in a contemporary context wherein exploring one’s sexual fantasies via the use of the Internet and new sexual technologies is increasingly being conflated with, and criminalized as, abuse or as inchoate crime (Gilden, 2016). Given that, as Gilden demonstrates, “tension between protected sexual identity and marginalized sexual fantasy has become particularly acute” in the legal realm, and that “judges and juries in several areas of the law repeatedly conflate sexual fantasy with sexual abuse, have largely been dismissive of both the merits and value of fantasy based defenses, and have relaxed evidentiary standards in ways that particularly prejudice individuals whose desires likely provoke disapproval or disgust" (2016: 423), there exists reason for sextech producers and consumers of all ilk to be concerned. In this context, sexuality, sextech, and socio-legal scholars are encouraged to further examine the perils *and* promises of sex robots and/as sexual fantasy, including whether and how their intersections invite new modes of affection, intimacy, and sexuality.

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Notes

1. I refer to sex robots, sexbots, sex doll-robots, sex doll-bots interchangeably.
2. Attempts by RealDoll to mitigate critiques about their reification of a narrow beauty standard exist on their website. For instance, RealDoll acknowledges numerous requests for chubby or Big Beautiful Women (BBW) but suggests that their lack of size diversity is due to prohibitive weight of their materials and user difficulty (https://www.realdoll.com/knowledgebase/do-you-make-a-bbw-or-chubby-doll/).
3. For an analysis of how "real" womanhood is conceptualized and defended by anti-sex robot/anti-trans feminists see Tessa Penich (2021) "Dystopian Panic, Transphobic Hatred, and Annihilation Anxiety: Critiquing Radical Feminist Opposition to Sex Robots," MA Thesis, Carleton University, Ottawa, Canada.
4. It is worth noting, without being too reductive, that this five-member team includes chief roboticist, Susan Pirzchalski, a white female, VR/AI specialist Kino Coursey, a Black man, and multiplatform developer Yuri Furuushi, a Brazilian male.

5. Among the top 10 Pornhub searches in 2019 were more novel content such as pornography involving aliens, costumes, video game characters, and celebrities (https://www.pornhub.com/insights/2019-year-in-review#searches).
6. An insight arrived at in conversation with my dear friend and scholar, Dina Georgis.

References

Amin F (2019) *'Sex Doll Brothel' Relaunches in Mississauga with New Owner*. City News Toronto. Available at: https://toronto.citynews.ca/2019/11/10/sex-doll-brothel-relaunches-in-mississauga-with-new-owner/ (accessed 16 June 2020).

Bardzell S and Bardzell J (2016) Technosexuality. In: *The Wiley Blackwell Encyclopedia of Gender and Sexuality Studies*. Atlanta, GA: American Cancer Society, pp. 1–3. DOI: 10.1002/9781118663219.wbegss469

Barker M (2007) Heteronormativity and the exclusion of bisexuality in psychology. In: Clarke V and Peel E (eds), *Out in Psychology: Lesbian, Gay, Bisexual, Trans and Queer Perspectives*. New York, NY: John Wiley and Sons, pp. 95–117. DOI: 10.1002/9780470713099.ch6

Barker M (2014) The 'problem' of sexual fantasies. *Porn Studies* 1: 143–160. DOI: 10.1080/23268743.2013.863656

Bartneck C and McMullen M (2018) *Interacting with Anatomically Complete Robots: A Discussion About Human-robot Relationships*. HRI'18 Companion: pp. 1–4. DOI: 10.1145/3173386.3173387

Beck J (2013) *Married to a Doll: Why One Man Advocates Synthetic Love*. Available at: https://www.theatlantic.com/health/archive/2013/09/married-to-a-doll-why-one-man-advocates-synthetic-love/279361/ (accessed 2 February 2021).

Bivona J and Critelli J (2009) The nature of women's rape fantasies: an analysis of prevalence, frequency, and contents. *Journal of Sex Research* 46(1): 33–45.

Blunt D and Stardust Z (2021) Automating whorephobia: sex, technology and the violence of deplatforming. *Porn Studies* 8(4): 350–366.

Borenstein J and Arkin R (2019) Robots, ethics, and intimacy: the need for scientific research. In: Berkich D and d'Alfonso MV (eds), *On the Cognitive, Ethical, and Scientific Dimensions of Artificial Intelligence. Philosophical Studies Series*. Cham: Springer International Publishing, pp. 299–309. DOI: 10.1007/978-3-030-01800-9_16

Bracewell LN (2016) Beyond Barnard: liberalism, antipornography feminism, and the sex wars. *Signs: Journal of Women in Culture and Society* 42(1): 23–48. DOI: 10.1086/686752

Burr-Miller A and Aoki E (2013). Becoming (hetero) sexual? The hetero-spectacle of idollators and their real dolls. *Sexuality and Culture* 17(3), pp. 384–400. DOI: 10.1007/s12119-013-9187-0

Butler J (1990) The force of fantasy- feminism. *Mapplethorpe, and Discursive Excess* 2(2): 105–125.

Butler J (2004) *Undoing Gender*. New York: Routledge.

Campaign Against Sex Robots (n.d.). Available at: https://campaignagainstsexrobots.org/ (accessed 21 July 2021).

Carpenter J (2017) *Deus Sex Machina: Loving Robot Sex Workers and the Allure of an Insincere Kiss*. The MIT Press. Available at: https://mitpress.universitypressscholarship.com/view/10.7551/mitpress/9780262036689.001.0001/upso-9780262036689-chapter-014 (accessed 22 April 2021).

CBC News (2019) *Sex Doll Ruled to Be Child Porn, but Judge Finds Kenneth Harrisson Not Guilty*. CBC News. Available at: https://www.cbc.ca/news/canada/newfoundland-labrador/kenneth-harrisson-not-guilty-1.5146259 (accessed 24 April 2020).

CBC Radio (2017) Me, my wife and our sex robot | CBC Radio. *Out in the Open*. Available at: https://www.cbc.ca/radio/outintheopen/can-robots-be-human-1.4363742/me-my-wife-and-our-sex-robot-1.4363910 (accessed 2 May 2021).

Chatterjee BB (2020) Child sex dolls and robots: challenging the boundaries of the child protection framework. *International Review of Law, Computers and Technology* 34(1): 22–43. DOI: 10.1080/13600869.2019.1600870

Cheung K (2022) People are creating sexbot girlfriends and treating them as punching bags. Available at: https://jezebel.com/ai-sex-chatbots-replika-abuse-problems-1848436769 (accessed 25 February 2022).

Chun WHK (2009) Introduction: race and/as technology; or, how to do things to race. *Camera Obscura: Feminism, Culture, and Media Studies* 24(170): 7–35. DOI: 10.1215/02705346-2008-013

Comella L (2017) *Vibrator Nation: How Feminist Sex-Toy Stores Changed the Business of Pleasure*. Illustrated edition. Durham: Duke University Press. Available at: https://www.google.co.in/books/edition/Vibrator_Nation/uQMxDwAAQBAJ?hl=en&gbpv=0

Comella L (2018) *Following Public Outcry, Houston City Council Nixes Robot Brothel*. Available at: https://www.forbes.com/sites/lynncomella/2018/10/08/following-public-outcry-houston-city-council-nixes-robot-brothel/ (accessed 24 April 2020).

Corbyn Z (2021) *AI Ethicist Kate Darling: 'Robots Can Be Our Partners'*. The Guardian. Available at: http://www.theguardian.com/technology/2021/apr/17/ai-ethicist-kate-darling-robots-can-be-our-partners (accessed 20 April 2021).

Coursey K, Pirzchalski S, McMullen M, et al. (2019) Living with harmony: a personal companion system by realbotix^{TM}. In: Zhou Y and Fischer MH (eds), *AI Love You*. Cham: Springer International Publishing, pp. 77–95. DOI: 10.1007/978-3-030-19734-6_4

Cowie E (1992) Pornography and fantasy. In: Segal L and McIntosh M (eds), *Sex Exposed: Sexuality and the Pornography Debate*. London: Virago Press, pp. 132–152.

Cruz A (2015) Beyond black and blue: BDSM, internet pornography, and black female sexuality. *Feminist Studies* 41(2): 409. DOI: 10.15767/feministstudies.41.2.409

Danaher J (2019) Regulating child sex robots: restriction or experimentation? *Medical Law Review* 27(4): 553–575. DOI: 10.1093/medlaw/fwz002

Darling K (2016) Extending legal protection to social robots: the effects of anthropomorphism, empathy, and violent behavior towards robotic objects. In: Calo F and Kerr C (eds), *Robot Law*. UK: Edward Elgar Publishing, pp. 213–234. DOI: 10.2139/ssrn.2044797

de Fren A (2009). Technofetishism and the uncanny desires of A.S.F.R. (alt.sex.fetish.robots). *Science Fiction Studies* 36(3). 404–440.

DeGenevieve B (2014) The emergence of non-standard bodies and sexualities. *Porn Studies* 1(1–2): 193–196.

Devlin K (2018) Utopia/dystopia. In: *Turned on: Science, Sex and Robots*. London: Bloomsbury.

Di Nucci E (2017) Sex robots and the rights of the disabled. In: Danaher J and McArhur N (eds), *Robot Sex: Social and Ethical Implications*. Cambridge, MA: MIT Press, pp. 73–88.

Dick PK (1968) *Do Androids Dream of Electric Sheep*. New York, NY: Doubleday.

Döring N, Mohseni MR and Walter R (2020) Design, use, and effects of sex dolls and sex robots: scoping review. *Journal of Medical Internet Research* 22(7): e18551. DOI: 10.2196/18551

Douthat R (2018) *The Redistribution of Sex*. New York, NY: The New York Times. Available at: https://www.nytimes.com/2018/05/02/opinion/incels-sex-robots-redistribution.html (accessed 25 April 2020).

Duggan L and Hunter ND (eds), (2006). *Sex Wars: Sexual Dissent and Political Culture*. Taylor and Francis.

Dyer R (1997) *White: Essays on Race and Culture*. Routledge. Milton Park, England: Available at: https://www.google.co.in/books/edition/White/ncIbd-Uch28C?hl=en

Fanon F (1952) *Black Skin, White Masks (Tran. CL Markmann)*. New York: Grove Press.

Get Real (n.d.). Available at: https://www.phrases.com/phrase/get-real_44695 (accessed 28 January 2021).

Getsy DJ (2013) Queer exercises: amber hawk Swanson's performances of self-realization. *GLQ: A Journal of Lesbian and Gay Studies* 19(4): 465–485. DOI: 10.1215/10642684-2279987

Ghosh P (2020) *Sex Robots May Cause Psychological Damage - BBC News*. BBC News.

Gibson C (2016) *The Future of Sex Includes Robots and Holograms. What Does that Mean for Us?* Washington Post. Available at: https://www.washingtonpost.com/news/soloish/wp/2016/01/14/the-future-of-sex-includes-robots-and-holograms-what-does-that-mean-for-us/ (accessed 2 May 2021).

Gilden A (2016) Punishing sexual fantasy. *William and Mary Law Review* 58(2): 419–492.

Gutiu SM (2016) *The Roboticization of Consent*. In: Law R, Calo R, Froomkin MA and Kerr I (eds), Elgar, pp. 186–212.

Hall S (1997) Culture, media, and identities. In: *Representation: Cultural Representations and Signifying Practices*. London: Sage in association with the Open University.

Hanson KR (2021) The silicone self: examining sexual selfhood and stigma within the love and sex doll community. *Symbolic Interaction* 45(2): 189–210. DOI: 10.1002/symb.575

Hart M (2020) *Evolving 'Digisexuality' May See Many Pick Tech Over People*. Nerdist. Available at: https://nerdist.com/article/digisexuality-tech-over-people/ (accessed 26 March 2021).

Hawk Swanson A (2017) *Doll Closet*. Available at: https://amberhawkswanson.com/Publications-Texts (accessed 12 May 2021).

Hearn J (2018). Where are the boundaries of sexuality? Hovering in a zone of uncertainty between sexualities and non-sexualities. *Sexualities* 21(8): 1368–1373. DOI: 10.1177/1363460718785108

Hunt S (2017) Love Machine. In: *The Dark Dark: Stories*. Farrar, Straus and Giroux.

Ing S (2020) *Inside Your Sexual Fantasies*. Psychology Today. Available at: https://www.psychologytoday.com/blog/sexual-futurist/202005/inside-your-sexual-fantasies (accessed 29 April 2021).

Jackson CA, Baldwin A, Brents BG, et al. (2019) EXPOsing men's gender role attitudes as porn superfans. *Sociological Forum* 34(2): 483–500. DOI: 10.1111/socf.12506

Joyal CC, Cossette A and Lapierre V (2015) What exactly is an unusual sexual fantasy? *The Journal of Sexual Medicine* 12(2): 328–340. DOI: 10.1111/jsm.12734

Karaian L (2019) Relative lust: accidental incest's affective and legal resonances. *Law, Culture and the HumanitiesSAGE Publications* 15(3): 806–825. DOI: 10.1177/1743872116661271

Khan U (2019) Chester brown and the queerness of johns. *Critical Analysis of Law* 6(1): 24.

Kitossa T (ed), (2021). *Appealing Because He Is Appalling: Black Masculinities, Colonialism, and Erotic Racism*. Edmonton: University of Alberta Press. Available at: https://www.uap.ualberta.ca/titles/988-9781772125436-appealing-because-he-is-appalling (accessed 4 June 2021).

Klein WEJ and Lin VW (2018) 'Sex robots' revisited: a reply to the campaign against sex robots. *ACM SIGCAS Computers and Society* 47(4): 107–121. DOI: 10.1145/3243141.3243153

Knapton S (2017) *From Doll Brothels to 'robotic Rape,' the Rise of Sex Robots Raises Ethical and Legal Dilemmas*. National Post. Available at: https://nationalpost.com/news/world/from-doll-brothels-to-robotic-rape-the-rise-of-sex-robots-raises-ethical-and-legal-dilemmas (accessed 24 April 2020).

Kubes T (2019a) Bypassing the uncanny valley: sex robots and robot sex beyond mimicry. In: Coeckelbergh M and Loh J (eds), *Feminist Philosophy of Technology*. Stuttgart: J.B. Metzler, pp. 59–73. Available at: http://link.springer.com/chapter/10.1007/978-3-476-04967-4_4 (accessed 29 April 2021).

Kubes T (2019b). New materialist perspectives on sex robots. A feminist dystopia/utopia? *Social Sciences* 8: 8224. DOI: 10.3390/socsci8080224

Lampen C (2017) *How the Fleshlight Became the Most Popular Male Sex Toy In America*. Men's Health. Available at: https://www.menshealth.com/sex-women/a19540539/history-of-fleshlight/(accessed 1 February 2022).

Lehmiller JJ (2018) How many people want to have sex with a robot? In: *Sex And Psychology*. Available at: https://www.lehmiller.com/blog/2018/11/28/how-many-people-want-to-have-sex-with-a-robot (accessed 29 April 2021).

Leitenberg H and Henning K (1995). Sexual fantasy. *Psychological Bulletin* 117(3): 469–496. DOI: 10.1037/0033-2909.117.3.469

Levy D (2007) *Love + Sex with Robots: The Evolution of Human-Robot Relations*. 1st edition. New York: HarperCollins.

Marsh S and Readers G (2017) *'The Stigma Is More in My Own Mind': Men on Using Viagra*. The Guardian. Available at: https://www.theguardian.com/lifeandstyle/2017/aug/14/the-stigma-is-more-in-my-own-mind-men-on-using-viagra (accessed 20 January 2022).

McArthur N and Twist MLC (2017) The rise of digisexuality: therapeutic challenges and possibilities. *Sexual and Relationship Therapy* 32(3–4): 334–344. DOI: 10.1080/14681994.2017.1397950

McGowan E (2019) *What Is Digisexuality? Exploring Sexuality Through Tech Is Becoming More Common*. Bustle. Available at: https://www.bustle.com/p/what-is-digisexuality-exploring-sexuality-through-tech-is-becoming-more-common-19304613 (accessed 24 June 2020).

Middleweek B (2021). Male homosocial bonds and perceptions of human–robot relationships in an online sex doll forum. *Sexualities* 24(3): 370–387. DOI: 10.1177/1363460720932383

Moore S (2017) *Sex Robots: Innovation Driven by Male Masturbatory Fantasy Is No Revolution*. *the Guardian*. Available at: http://www.theguardian.com/technology/commentisfree/2017/jul/05/sex-robots-innovation-driven-by-male-fantasy-is-not-a-revolution (accessed 19 July 2021).

Moran JC (2019) Programming power and the power of programming: an analysis of racialised and gendered sex robots. In: Loh J and Coeckelbergh M (eds), *Feminist Philosophy of Technology. Techno: Phil – Aktuelle Herausforderungen der Technikphilosophie*. Stuttgart: J.B. Metzler, pp. 39–57. DOI: 10.1007/978-3-476-04967-4

Nash JC (2014) *The Black Body in Ecstasy*. Duke University Press. Available at: https://www.dukeupress.edu/the-black-body-in-ecstasy (accessed 25 April 2020).

Neuman F (2014) *Sexual Fantasies*. Psychology Today. Available at: http://www.psychologytoday.com/blog/fighting-fear/201404/sexual-fantasies (accessed 29 April 2021).

Nguyen TH (2014) *A View from the Bottom: Asian American Masculinity and Sexual Representation*. Duke University Press. Available at: https://catalog.hathitrust.org/Record/102567776?

Online Etymology Dictionary (n.d.) *Doll*. Available at: https://www.etymonline.com/word/doll (accessed 28 January 2021).

Payette G (2017) *Child Sex Doll Trial Opens Pandora's Box of Questions About Child Porn*. CBC News. Available at: https://www.cbc.ca/news/canada/newfoundland-labrador/child-sex-doll-trial-1.3976228 (accessed 25 April 2020).

Pemberton B (2020) *Polyamorous Couple With 'Feelings' for A £5k Sex Robot go Everywhere Together*. Available at: https://www.thesun.co.uk/fabulous/11392438/polyamorous-couple-real-feelings-robotic-sex-doll/ (accessed 2 February 2021).

Penich T (2021) Dystopian Panic, Transphobic Hatred, and Annihilation Anxiety: Critiquing Radical Feminist Opposition to Sex Robots, MA Thesis, Carleton University, Ottawa, Canada.

Pheterson G (1993) *The Whore Stigma: Female Dishonor and Male Unworthiness. Social Text*. Duke University Press, 37, p. 39–64. DOI: 10.2307/466259

Puig K (2019). The trans alien manifesto future love(s), sex tech, and my efforts to re-member your embrace. *TSQ: Transgender Studies Quarterly* 6(4): 491–520. DOI: 10.1215/23289252-7771667

Rajnerowicz K (2021) Will AI take your job? fear of AI and AI trends for 2021. Available at: https://www.tidio.com/blog/ai-trends/ (accessed 20 September 2021).

RealDoll (n.d.) *Realdoll*. Available at: https://www.realdoll.com/(accessed 25 April 2020).

RealDoll HarmonyX (n.d.). Available at: https://www.realdoll.com/product/harmony-x/

Reece M, Herbenick D, Sanders SA, et al. (2009) Prevalence and characteristics of vibrator use by men in the United States. *The Journal of Sexual Medicine* 6(7): 1867–1874. DOI: 10.1111/j.1743-6109.2009.01290.x

Rees G and Garcia JR (2017) An investigation into the solitary and interpersonal aspects of sexual object fetishism: a mixed-methods approach. *Psychology and Sexuality* 8(4): 252–267. DOI: 10.1080/19419899.2017.1383301

Richardson K (2016) The asymmetrical 'relationship': parallels between prostitution and the development of sex robots. *ACM SIGCAS Computers and Society* 45(3): 290–293. DOI: 10.1145/2874239.2874281

Richardson K (2016a). Sex robot matters: slavery, the prostituted, and the rights of machines. *IEEE Technology and Society Magazine* 35(2): 46–53. DOI: 10.1109/MTS.2016.2554421

Riggs DW (2007) Recognizing race in LGBTQ psychology: power, privilege and complicity. In: Clarke V and Peel E (eds), *Out in Psychology*. John Wiley and Sons, pp. 59–76. DOI: 10.1002/9780470713099.ch4

Roberts SO, Bareket-Shavit C, Dollins FA, et al. (2020) Racial inequality in psychological research: trends of the past and recommendations for the future. *Perspectives on Psychological Science* 15(6): 1295–1309.

Rodriguez JM (2011) Queer sociality and other sexual fantasies. *GLQ: A Journal of Lesbian and Gay Studies* 17(2–3): 331–348. DOI: 10.1215/10642684-1163427

Rodríguez JM (2011). Queer sociality and other sexual fantasies. *GLQ: A Journal of Lesbian and Gay Studies* 17(2–3)331–348. DOI: 10.1215/10642684-1163427

Rosen D (2017) *Sex Robots: The Sad Future of Sexual Fantasy*. Counter Punch. Available at: https://www.counterpunch.org/2017/08/25/sex-robots-the-sad-future-of-sexual-fantasy/ (accessed 19 July 2021).

Scheutz M and Arnold T (2016) Are we ready for sex robots? In: *2016 11th ACM/IEEE International Conference on Human-Robot Interaction (HRI)*. pp. 351–358. DOI: 10.1109/HRI.2016.7451772

Sedgwick EK (2003) Paranoid reading and reparative reading, Or, you're so paranoid, you probably think this essay is about you. In: *Touching Feeling: Affect, Pedagogy, Performativity*. Durham, NC: Duke University Press, pp. 123–151.

Su NM, Lazar A, Bardzell J, et al. (2019) Of dolls and men: anticipating sexual intimacy with robots. *ACM Transactions on Computer-Human Interaction* 26(3): 1–35. DOI: 10.1145/3301422

Szczuka JM and Krämer NC (2017) Not only the lonely—how men explicitly and implicitly evaluate the attractiveness of sex robots in comparison to the attractiveness of women, and personal characteristics influencing this evaluation. *Multimodal Technologies and InteractionMDPI AG* 1(1): 3. DOI: 10.3390/mti1010003

Taormino T (ed), (2013). *The Feminist Porn Book: The Politics of Producing Pleasure*. New York, NY: Feminist Press at the City University of.

Tiehen J (2018) *Virtue Ethics and the CREEPER Act*. Seattle University Law Review, 41, p. 1153.

Valverde SH (2012) *The Modern Sex Doll-Owner: A Descriptive Analysis*. San Luis Obispo, CA: California Polytechnic State University. DOI: 10.15368/theses.2012.165

Wajcman J (2007) From women and technology to gendered technoscience. *Information, Communication and Society* 10(3): 287–298. DOI: 10.1080/13691180701409770

Weitzer R (2018). Resistance to sex work stigma. *Sexualities* 21(5–6): 717–729. DOI: 10.1177/1363460716684509

Winterson J (2019) *Frankissstein: A Love Story*. Vintage Digital.

Wiseman E (2015) *Sex, Love and Robots: Is This the End of Intimacy?* Guardian. Available at: https://www.theguardian.com/technology/2015/dec/13/sex-love-and-robots-the-end-of-intimacy

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CLITORAL ANATOMY IN NULLIPAROUS, HEALTHY, PREMENOPAUSAL VOLUNTEERS USING UNENHANCED MAGNETIC RESONANCE IMAGING

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Abstract

Purpose—We determined the magnetic resonance imaging (MRI) characteristics of normal clitoral anatomy.

Materials and Methods—A series of MRI studies of 10 healthy, nulliparous volunteers with no prior surgery and normal pelvic examination was studied and the key characteristics of clitoral anatomy were determined. A range of different magnetic resonance sequences was used without any contrast agent.

Results—The axial plane best revealed the clitoral body and its proximal continuation as the paired crura. The glans was seen more caudal than the body of the clitoris. The bulbs of the clitoris had the same signal as the rest of the clitoris in the axial plane and they related consistently to the other erectile structures. The bulbs, body and crura formed an erectile tissue cluster, namely the clitoris. In turn, the clitoris partially surrounded the urethra and vagina, forming a consistently observed tissue complex. Midline sagittal section revealed the shape of the body, although in this plane the rest of the clitoris was poorly displayed. The coronal plane revealed the relationship between the clitoral body and labia. The axial section cephalad to the clitoral body best revealed the vascular component of the neurovascular bundle to the clitoris. The fat saturation sequence particularly highlighted clitoral anatomy in healthy, premenopausal, nulliparous women.

Conclusions—Normal clitoral anatomy has been clearly demonstrated using noncontrast pelvic MRI.

Keywords

clitoris; magnetic resonance imaging; anatomy; premenopause; parity

Although there has been some recent progress, advances in understanding male sexual function and dysfunction have not been paralleled by similar advances in female sexual function, even in basic anatomy and physiology. A problem facing researchers in female sexuality is the fact that the clitoris is largely an internal structure relative to the external visibility of the penis. Clitoral anatomy based on cadaveric studies have been limited by the lack of access to younger

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specimens with most being from elderly, postmenopausal women in whom erectile structures were distorted by the absence of blood flow and by the embalming process.

Suh et al described detailed imagery of female genital anatomy using magnetic resonance imaging (MRI) with the blood pool contrast medium MS-325.[1] Visualization was poor or absent on T1-weighted images prior to contrast medium use. Two other reports from the same center indicated that this is useful for evaluating female sexual arousal.[2, 3] However, there is no comment on MRI obtained by the fat saturation technique and planes other than the axial plane are not provided. Prior studies also involved women in whom parity status was unknown. We present findings in a series of healthy, premenopausal, nulliparous volunteers and describe clitoral anatomy as seen in each plane using unenhanced MRI. Dissection studies revealed significant age related atrophy, and so we expected that clitoral tissues of premenopausal women would be more easily distinguished with MRI than would tissues from an unselected group of women.

MATERIALS AND METHODS

An institutional review board approved MRI study was commenced at the University of Michigan, Ann Arbor in 1994. This prospective study involved the MRI evaluation of 240 patients, specifically to evaluate the effects of a first birth. Among these women were a consecutive series of 10 healthy, nulliparous, premenopausal volunteers with no prior surgery and no abnormality on pelvic examination. They underwent several MRI sequences to test which of them best showed the pelvic floor structures. These scans form the basis of this study.

Scanning techniques included T2-weighted fast spin-echo (FSE), T1-weighted spin-echo and proton density FSE with or without fat saturation. A 1.5 Tesla magnet machine was used to create the images. For most scans 0.4 cm section thickness with a 1.0 cm space between sections and a matrix size of 256 × 256 were used. Each scan was first examined to determine the features present in each plane (axial, coronal and sagittal) with each type of scanning. In a few series 1.0 cm sections were used and the sections omitted anatomical detail. For the purpose of clarifying clitoral anatomy only images using 0.4 cm section thickness are shown. All scans were then reexamined to determine the consistency with each of the features identified. The consistent findings are detailed. Structure identification was based on our previous published cadaver studies.[4]

Prior to analysis all images were converted into digital files masking identifying features (name and date of birth) of the individual. No other modification of the images was made.

RESULTS

Clitoral anatomy was shown most clearly in the axial plane. The sagittal and coronal planes provided further details and they were complementary. Ultimately all components of the clitoris, crura, corpora, bulbs, glans and its neurovascular bundle could be clearly identified on MRI after the combination of the 3 planes was used. Each plane provided a different representation of the structure.

Figure 1, *A* shows a typical axial proton density scan without fat saturation. The clitoris is ventral to the urethra and vagina. Its body projects into the fat of the mons pubis. It is composed of 5 components, namely the paired corpora united in the midline and separated only by a fibrous septum, the bilateral (vestibular) bulbs and the single glans. The glans is a more caudal structure and, therefore, it was seen in more caudal sections (fig. 1, *B* and *C*). The corpora diverge and follow the pubic rami on each side, where they are called the crura. The clitoris is distinct from the urethra and vagina. In figure 1, *A* the target-like appearance of the urethra is particularly distinct with the urethral wall having a darker gray color than the surrounding

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clitoris. The bulbs flank the urethra and vagina laterally. This axial section lies directly caudal to the symphysis pubis. The fat in this sequence is the whitest structure, followed by the cavernous tissue of the clitoris, the urethral lumen, the vaginal wall, the urethral wall and finally muscle in decreasing order of intensity. Dorsally the clitoris, urethra and vagina are related to the ischiorectal fat and in the midline they are related to the anal canal. The body of the clitoris is an angled structure that projects inferiorly into the mons pubis fat with its most caudal part continuous with the glans clitoris. Figure 1, *B* shows an axial section 1.0 cm caudal to the figure 1, *A* section. Because of the shape of the clitoris, the glans is typically seen in a more caudal axial section than the rest of the clitoris. In this woman the glans is seen in 2 sections (fig. 1, *B* and *C*). In the more caudal sections the urethra and vagina are not distinct and the caudal limit of the bulbs is just visible lateral to the urethra. The glans is the most distinct clitoral structure in these sections. In some women the urethral meatus was also distinct in the most caudal section.

The cavernous or erectile tissue was highlighted using a fat saturation technique. In this type of scan the fat appeared black and the cavernous structures of the clitoris were bright white (fig. 2). The urethral wall and vagina were also highlighted with this technique, although to a lesser extent than cavernous tissue. Other surrounding tissues, muscle and bone appeared as dark structures, increasing the contrast with the centrally placed cavernous structures. In axial section the clitoris formed a triangular complex with the urethra and vagina, namely the clitorourethrovaginal complex.

In figure 3, *A* the structures best seen are the vessels of the neurovascular bundles arising from the pelvic side wall, where the terminal component of the pudendal neurovascular bundle bifurcates into perineal and clitoral divisions to supply the clitorourethrovaginal complex. The perineal division is also best seen in figure 3, *A*, while the clitoral division, which ascends along the inferior pubic ramus adjacent to the crura, is best seen in figure 3, *B*. The neurovascular bundle is cranial to the clitoral body. The autonomic cavernous neurovascular supply to the clitoris is not visible on these MRI studies. The large clitoral neurovascular bundles on either side ascend along the ischiopubic ramus to the under surface of the pubic symphysis in the midline, from which they run along the cephalad surface of the clitoral body toward the glans. These bundles, which were easily seen using dissection techniques, were not large enough to be visible consistently on MRI, although fat saturation is known to highlight the vascular structures.

Sagittal scans demonstrated the angled clitoral body and glans projecting into the mons on the under surface of the symphysis pubis (fig. 4). The bulbs and crura were also visible in more lateral sections, although not well displayed. Coronal sections revealed the 2 corpora forming the body and ending as the glans clitoris (fig. 5). The body was seen attached to the under surface of the symphysis pubis. The labia minora and majora were well seen in this coronal section. The glans is visible extending more dorsal toward the anus because of its tendency to curve dorsal and caudal.

Bulbar anatomy is best displayed in axial views and it was seen to a limited extent in sagittal and coronal views in all women. The bulbs met ventral to the urethra. Dissection studies have shown that they are not continuous across the midline.[4] They descend on either side of the urethra and flank the lateral aspect of the distal vaginal wall bilaterally.[4] The bulbs have a more consistent relationship with the clitoris and urethra than with the vestibule. Thus, in this study the bulbs are named the bulbs of the clitoris according to their consistent relationship to the clitoris.

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DISCUSSION

MRI studies of the clitoris complement studies previously performed in cadavers[4] and reveal the anatomy in healthy, premenopausal nullipara. No major differences were apparent between findings in the cadavers and on MRI, although in cadavers the structures appeared to be atrophic, as would be expected because of the advanced age of most specimens and other reasons.

Historical, social and scientific factors appear to be responsible for the poor presentation of clitoral anatomy even in current textbooks. Active deletion of the clitoris as a labeled structure from an early version of Gray's Anatomy compared with subsequent versions indicates the influence of social factors over science.[5] The medical profession has also had a major influence on female sexuality throughout history, particularly in the 19th century. The widespread practice in Western medicine of clitoridectomy for indications as diverse as epilepsy, hysteria and catalepsy is relatively recent.[6] In addition to such factors, anatomists have compounded the poor display of clitoral anatomy by revealing it only in 1 plane. While the sagittal plane may suit the display of an essentially linear structure such as the penis, the clitoris is not well displayed in this plane. The axial plane is the most useful. As a multiplanar modality, MRI reveals each component of the clitoris and complements the information obtained at dissection.

This MRI study of the clitoris revealed each clitoral component in detail. The advantages of MRI over dissection based study are that it reveals anatomy in the living subject and it has the ability to enhance a given tissue because of its relative response to magnetic resonance. The MRI technique of fat saturation enhances cavernous tissue, of which the clitoris is composed. Fat saturation gives each clitoral structure a white appearance juxtaposed to all related structures, which are a shade of gray. Even the urethra and vagina, which are vascular structures, appear relatively gray by comparison to the clitoris. This indicates the highly vascular nature of the clitoris even in the nonaroused state.

Recent research has shown that MRI is capable of demonstrating vascular enhancement that may correlate with female sexual arousal, thereby, showing great promise for sexual function studies.[1–3] The new, gadolinium based, blood pool contrast agent MS-325 administered intravenously has been found to provide an excellent depiction of the female genitalia in premenopausal and postmenopausal women.[1] The same agent has been shown to be useful in studying changes in female genitalia that occur with sexual arousal. The exact superiority of this contrast enhanced, T1-weighted study over the unenhanced fat saturation technique is not clear. MRI with phased array pelvic and endorectal coils has been shown to be an excellent tool for studying the female urethra and periurethral diseases.[7]

Objective imaging techniques such as MRI and even photography help overcome the inaccuracies associated with diagrams. The structures least well described in anatomical textbooks to date are the bulbs. Typically their relationship to the clitoris and urethra is not acknowledged or in fact said not to exist.[8] When depicted, the bulbs are usually drawn as if they pass alongside the vaginal introitus, forming the core of the labia. MRI clearly shows the extensive relationship between the urethra and bulbs, and also reveals how these structures are intimately related to the crura and corpora forming the root of the clitoris, an anatomical structure mentioned in some recent anatomical textbooks.[9] The view of the bulbs afforded by MRI shows even more clearly than with dissection that the bulbs on either side continue anterior to the urethra and meet together in the midline without merging. The exact role of the bulbs in urethral support and sexual function is unclear. Recent study has suggested they have a significant role in urethral continence.[10] The concept of the clitorourethrovaginal complex is

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not new, having been called by French investigators after ultrasound based studies the "ensemble uretro clitoridovulvaire."[11]

Previous studies have used confusing terminology or techniques that have failed clearly to demonstrate clitoral anatomy. Recently MRI of couples copulating have been shown in sagittal section,[12] the plane which in these studies least clearly displays the clitoris. In the same study the male subject only was administered sildenafil, relatively enhancing the signal intensity of the penis and further obscuring the clitoris. In another MRI study in which a woman with true hermaphroditism was depicted[13] the term corpus spongiosum was used in reference to the bulbs. In this study the clitoris was noted to be barely visible, part of the difficulty again being the choice of plane, ie sagittal rather than axial, the latter being the plane of preference for clitoral anatomy.

CONCLUSIONS

We observed that normal clitoral anatomy in healthy volunteers can be well displayed by MRI using fat saturation techniques without using any contrast agent. The bright erectile tissue of the clitoris surrounds the urethrovaginal complex anterolaterally. The bulbs are recognized as parts of the clitoris and they should be preferably called bulbs of clitoris rather than vestibular bulbs. Axial views are more useful for depicting most of the clitoris, and the sagittal and coronal planes are complementary. This study complements cadaveric studies of clitoral anatomy and provides further insights into the role and scope of MRI for demonstrating normal anatomy.

Professor John Hutson, Royal Children's Hospital, Melbourne supervised the dissection based female urogenital anatomy project.

References

1. Suh DD, Yang CC, Cao Y, Garland PA, Maravilla KR. Magnetic resonance imaging anatomy of the female genitalia in premenopausal and postmenopausal women. J Urol 2003;170:138. [PubMed: 12796666]
2. Maravilla KR, Cao Y, Heiman JR, Garland PA, Peterson BT, Carter WO, et al. Serial MR imaging with MS-325 for evaluating female sexual arousal response: determination of intrasubject reproducibility. J Magn Reson Imaging 2003;18:216. [PubMed: 12884335]
3. Deliganis AV, Maravilla KR, Heiman JR, Carter WO, Garland PA, Peterson BT, et al. Female genitalia: dynamic MR imaging with use of MS-325: initial experiences evaluating female sexual response. Radiology 2002;225:791. [PubMed: 12461263]
4. O'Connell HE, Hutson JM, Anderson CR, Plenter RJ. Anatomical relationship between urethra and clitoris. J Urol 1998;159:1892. [PubMed: 9598482]
5. Moore LJ, Clarke AE. Clitoral conventions and transgressions: graphic representations in anatomy texts, c1900–1991. Feminist Studies 1995;21:255.
6. Sheehan E. Victorian clitoridectomy: Isaac Baker Brown and his harmless operative procedure. Med Anthropol Newsl 1981;12:9. [PubMed: 12263443]
7. Siegelman ES, Banner MP, Ramchandani P, Schnall MD. Multicoil MR imaging of symptomatic female urethral and periurethral disease. Radiographics 1997;17:349. [PubMed: 9084077]
8. Bannister LH, Dyson M. Reproductive organs of the female. Vagina; female sexual organs. In: Gray's Anatomy, 38th ed. Edited by P. L. Williams, L. H. Bannister, M. M. Berry, P. Collins, M. Dyson, J. E. Durrek et al. New York: Churchill Livingstone, sect. 14, pp. 1875–1877, 1995
9. Snell RS. The perineum. In: Clinical Anatomy for Medical Students, 5th ed. Boston: Little, Brown and Co., chapt. 8, pp. 347–379, 1955
10. Baggish MS, Steele AC, Karram MM. The relationship of the vestibular bulb and corpora cavernosa to the female urethra: a microanatomic study. Part 2 J Gynecol Surg 1999;15:171.

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11. Lenck LC, Vanneuville G, Monnet JP, Harmand Y. Sphincter urétral (point G). Corrélations anatomocliniques. Rev Fr Gynec Obst 1992;87:65. [PubMed: 1570456]
12. Schultz WW, van Andel P, Sabelis I, Mooyaart E. Magnetic resonance imaging of male and female genitals during coitus and female sexual arousal. Br Med J 1999;319:1596. [PubMed: 10600954]
13. Hricak H, Chang YC, Thurnher S. Vagina: Evaluation with MRI imaging. Part I Normal anatomy and congenital anomalies. Radiology 1988;169:169. [PubMed: 3420255]

APPENDIX

Each MRI study is accompanied by a diagram to highlight the clitoris: the anatomy of its components, neurovascular supply and the related structures, the urethra and vagina.

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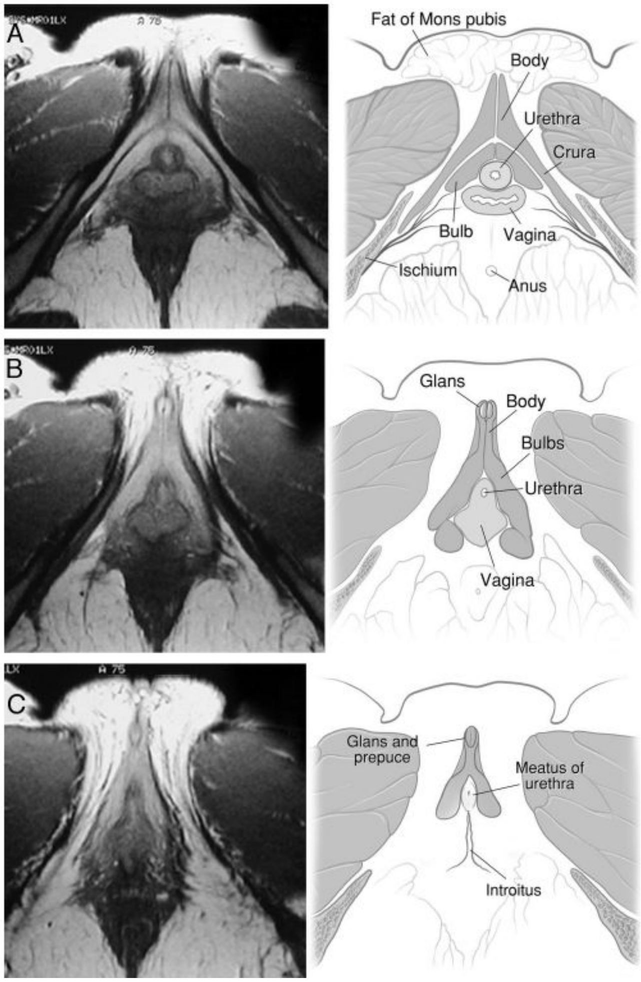
A
Fat of Mons pubis
Body
Urethra
Crura
Bulb
Vagina
Ischium
Anus
B
Glans
Body
Bulbs
Urethra
Vagina
C
Glans and prepuce
Meatus of urethra
Introitus

Fig. 1.

A, clitoris and its components, including bulbs, crura and corpora, are well demonstrated in axial plane. These structures lie ventral and lateral to urethra and vagina as cluster or complex. MRI specifications for this scan were FSE, TR:4000, TE:15/Ef, EC:1/1 16kHz, FOV: 16x16, 4.0thk/1.0sp, 30/04:16, 256x256/2 NEX, FCs/NP. *B* and *C*, next 2 sections caudal to section *A* in same volunteer. *B*, clitoral glans ventral to remainder of clitoris. Its midline septum and prepuce are evident. *C*, most caudal section reveals glans and caudal limit of urethra (urethral meatus), clitoral bulbs and vagina (introitus). In this perineal section clitoral body and crura are not present and urethral meatus and vaginal introitus are not distinct. MRI specifications were FSE, TR:4000, TE:15/Ef, EC:1/1 16kHz, FOV:16x16, 4.0thk/1.0sp, 30/04:16, 256x256/2 NEX, FCs/NP.

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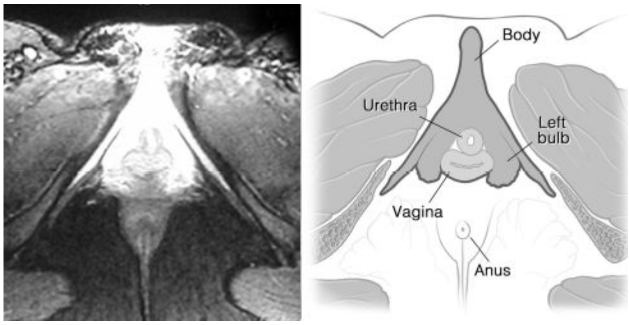

Fig. 2.
Using fat saturation highlighted cavernous tissue of clitoris surrounding urethra and vagina, while other structures appeared gray or black. Triangular clitorourethrovaginal complex was clearly seen using this sequence. MRI specifications were FSEIR, TR:4083, TE:22/Ef, EC:1/1 31.2kHz, TI:165, FOV20x20, 6.0thk/1.5sp, 15/06: 32, 256x192/4 NEX, NP/VB/SQ/SPF.

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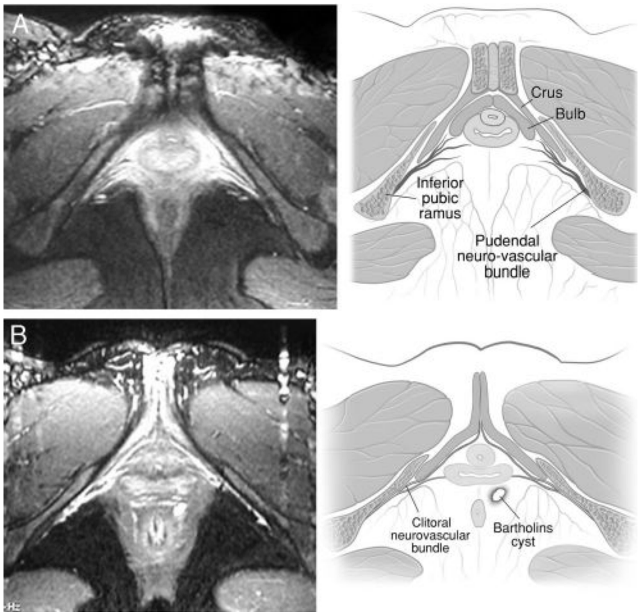
A
Crus
Bulb
Inferior pubic ramus
Pudendal neuro-vascular bundle
B
Clitoral neurovascular bundle
Bartholins cyst

Fig. 3.

A, this axial section cephalad to image shown in figures 1 and 2 reveals divisions of pudendal neurovascular bundle (clitoral and perineal neurovascular bundles) supplying complex. Vascular structures of bundle and cavernous tissue are highlighted by fat saturation. Nerves are not shown by MRI but they are known from dissections to accompany vessels. *B*, another fat saturated section cephalad to clitoris highlights clitoral veins draining into pudendal neurovascular bundle attaching to pelvic side wall.

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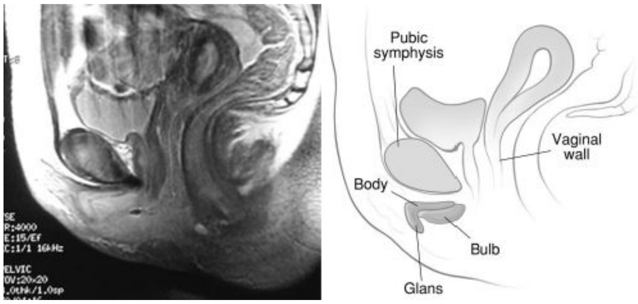
SE
R:4000
E:15/Ef
C:1/1 16kHz
ELVIC
OV:20x20
.0thk/1.0sp
Pubic symphysis
Vaginal wall
Body
Bulb
Glans

Fig. 4.
This midline sagittal section highlights almost boomerang-like appearance of clitoral body, crura and glans. MRI specifications were FSE, TR:4000, TE:15/Ef, EC:1/1 16kHz, FOV: 20x20, 4.0thk/1.0sp, 30/04:16, 256x256/2 NEX, FCf/NP.

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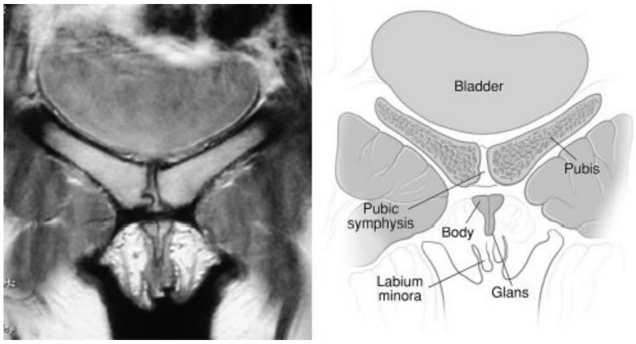
Bladder
Pubis
Pubic symphysis
Body
Labium minora
Glans

Fig. 5.
Coronal section reveals paired clitoral corpora comprising clitoral body, located caudal to pubic symphysis. Caudal limit of body is glans. Relationship between glans and labia is seen. MRI specifications were FSE, TR:4000, TE:15/Ef, EC:1/1 16kHz, FOV:16x16, 4.0thk/1.0sp, 30/04:16, 256x256/2 NEX, FCf/NP.

Magnetic resonance imaging of male and female genitals during coitus and female sexual arousal

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BMJ 1999;319:1596–600

Abstract

Objective To find out whether taking images of the male and female genitals during coitus is feasible and to find out whether former and current ideas about the anatomy during sexual intercourse and during female sexual arousal are based on assumptions or on facts.
Design Observational study.
Setting University hospital in the Netherlands.
Methods Magnetic resonance imaging was used to study the female sexual response and the male and female genitals during coitus. Thirteen experiments were performed with eight couples and three single women.
Results The images obtained showed that during intercourse in the "missionary position" the penis has the shape of a boomerang and 1/3 of its length consists of the root of the penis. During female sexual arousal without intercourse the uterus was raised and the anterior vaginal wall lengthened. The size of the uterus did not increase during sexual arousal.
Conclusion Taking magnetic resonance images of the male and female genitals during coitus is feasible and contributes to understanding of anatomy.

Introduction

"I expose to men the origin of their first, and perhaps second, reason for existing."[1] Leonardo da Vinci (1452-1519) wrote these words above his drawing "The Copulation" in about 1493 (fig 1).[2] The Renaissance sketch shows a transparent view of the anatomy of sexual intercourse as envisaged by the anatomists of his time. The semen was supposed to come down from the brain through a channel which can be seen in the spine of the man. In the woman the right lactiferous duct is depicted as originating in the right female breast and ending in the genital area. Even a genius like Leonardo da Vinci distorted men's and women's bodies—as seen now—to fit the ideology of his time and to the notions of his colleagues, who he paid tribute to.

The first careful study—since the sketch by Leonardo da Vinci—of the interaction of male and female human genitals during coitus was published by Dickinson in 1933 (fig 2).[3] A glass test tube as big as a penis in erection inserted into the vagina of female subjects who were sexually aroused by clitoral stimulation (occasionally with a vibrator) guided him in constructing his pictorial supposition.

In the 1960s Masters and Johnson made their assessments with an artificial penis that could mechanically imitate natural coitus and by "direct observation"—the introduction of a speculum and bimanual palpation.[4 5] Their most remarkable observations regarding sexual arousal in the woman were the backwards and upwards movements of the anterior vaginal wall (vaginal tenting) and a 50-100% greater volume of the uterus. This increase disappeared 10-20 minutes after orgasm. When sexual excitement without orgasm occurred, the volume returned to normal in 30-60 minutes. Masters and Johnson presumed that the greater volume of the uterus was due to engorgement with blood. However, they qualified their presumption: "In view of the artificial nature of the equipment, legitimate issue may be raised with the integrity of observed reaction patterns."[4]

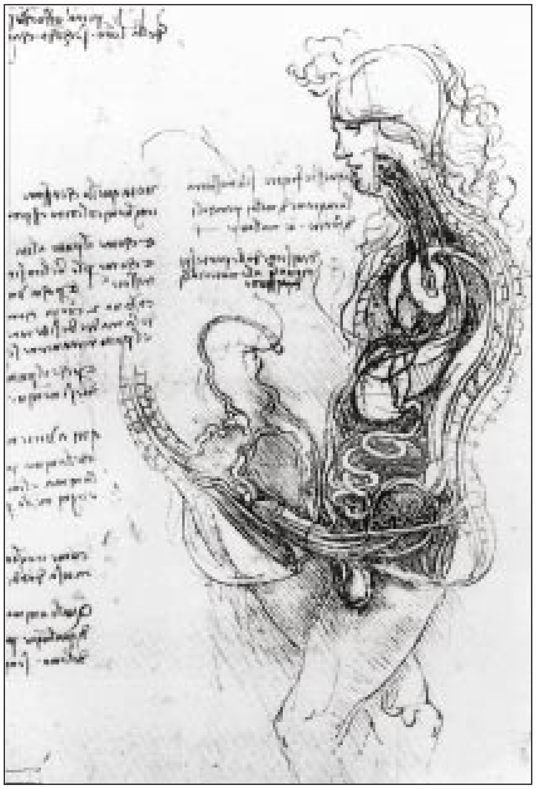

Fig 1 "The Copulation" as imagined and drawn by Leonardo da Vinci.[2] With permission from the Royal Collection. Her Majesty Queen Elizabeth II is gratefully acknowledged

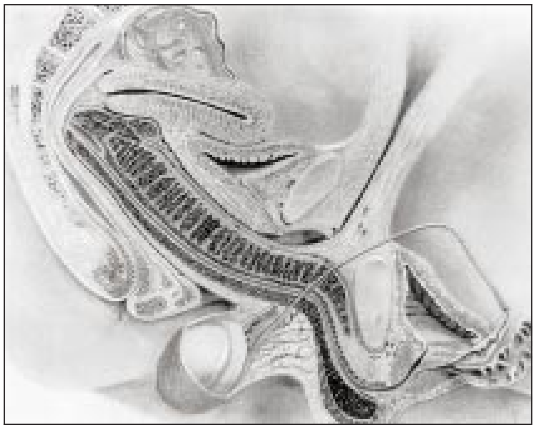

Fig 2 Midsagittal image of the anatomy of sexual intercourse envisaged by R L Dickinson and drawn by R S Kendall[3]

In 1992 Riley et al published an ultrasound study on copulation.[6] The images were of relatively poor quality as they used hand held, self scanning equipment, and none of the images was overview. We used magnetic resonance imaging to study the anatomy and physiology of human sexual intercourse. Our search started in 1991 when one of us (PvA) saw a black and white slide of a midsagittal magnetic resonance image of the mouth and throat of a professional singer who was singing "aaa." He remembered Leonardo's drawing and wondered whether it would be possible to take such an image of human coitus. We decided to try, as an ad hoc "instrument-oriented" study, despite the unscientific and other irrelevant reactions we expected and received: honi soit, qui mal y pense.

Magnetic resonance imaging had already been used as a diagnostic tool to study erectile impotence[7]; it is particularly attractive for this kind of study because it produces images with exquisite anatomical detail that are clearer than those obtained with ultrasonography or radiography, and—as far as we know—it is safe. The aim of the study was initially to find out whether taking images of the male and female genitals during coitus is feasible, and later whether former and current ideas about the anatomy during sexual intercourse and during female sexual arousal are based on assumptions or on facts.

Subjects and methods

The participants (pairs of men and women) were recruited by personal invitation and through a local scientific television programme. Respondents were invited to participate if they met the following criteria: older than 18 years, intact uterus and ovaries, and a small to average weight/height index. The experimental procedure was explained in a letter sent to respondents along with an informed consent form. Participants were assured confidentiality, privacy, anonymity, and the possibility of withdrawing from the study at any time. After written informed consent had been obtained, the participants were invited to come for a scan when the equipment was available on a Saturday.

The tube in which the couple would have intercourse stood in a room next to a control room where the searchers were sitting behind the scanning console and screen. An improvised curtain covered the window between the two rooms, so the intercom was the only means of communication. Imaging was first done in a 1.5 Tesla Philips magnet system (Gyroscan S15) and later in a 1.5 Tesla magnet system from Siemens Vision. To increase the space in the tube, the table was removed: the internal diameter of the tube is then 50 cm. The participants were asked to lie with pelvises near the marked centre of the tube and not to move during imaging. After a preview, 10 mm thick sagittal images were taken with a half-Fourier acquisition single shot turbo SE T2 weighted pulse sequence (HASTE). The echo time was 64 ms, with a repetition time of 4.4 ms. With this fast acquisition technique, 11 slices of relatively good quality were obtained within 14 seconds.

The volunteers were shown the equipment in the two rooms, and personal and gynaecological histories were taken. The experimental procedure was explained, and all investigators left the imaging room. After a preliminary image for positioning the true pelvis of the woman was taken, the first image was taken with her lying on her back (image 1). Then the male was asked to climb into the tube and begin face to face coitus in the superior position (image 2). After this shot—successful or not—the man was asked to leave the tube and the woman was asked to stimulate her clitoris manually and to inform the researchers by intercom when she had reached the preorgasmic stage. Then she stopped the autostimulation for a third image (image 3). After that image was taken the woman restarted the stimulation to achieve an orgasm. Twenty minutes after the orgasm, the fourth image was taken (image 4). At the end of the experiment, the images were evaluated in the presence of the participants.

Results

Thirteen experiments were performed with eight couples (three couples performed two experiments each) and three single women. The table shows age, weight/height index, parity, type of contraception, female orgasm (yes/no), and the depth of penetration (partial or complete). No women reported having a "g-spot" or producing female ejaculation during orgasm. On two Saturdays in 1991 (experiments 1 and 2) the first couple succeeded with complete penetration that lasted sufficiently long for the images to be taken. The

Magnetic resonance imaging during coitus (8 couples) and sexual arousal (11 women)

Experiment	Age (man/woman)	Weight/ height (man/ woman)	No of children	Contraception	Female orgasm	Penetration	Details
1	41/40	0.33/0.39	1	Vasectomy	No	Complete	Movement artefact (1991)
2	43/42	0.33/0.39	1	Vasectomy	No	Complete	Movement artefact (1993)
3	21/20	0.31/0.30	0	Oral	No	Partial	Movement artefact (1996)
4	23	0.35	0	Oral	Yes	No	No partner
5	40	0.40	3	No	Yes	No	No partner
6	35	0.37	0	Oral	Yes	No	No partner
7	20/21	0.32/0.30	0	Oral	Yes	Partial	No
8	23/21	0.38/0.34	0	Oral	Yes	Partial	No
9	28/27	0.35/0.30	0	No	Yes	Nearly complete	No
10	24/21	0.39/0.40	0	Oral	Yes	Nearly complete	Uterus in retroversion
11	26/26	0.35/0.33	0	Oral	Yes	Nearly complete	No
12	25/22	0.39/0.40	0	Oral	No	Complete	Sildenafil 25 mg; uterus in retroversion (1998)
13	28/28	0.35/0.33	0	Oral	No	Complete	Sildenafil 25 mg

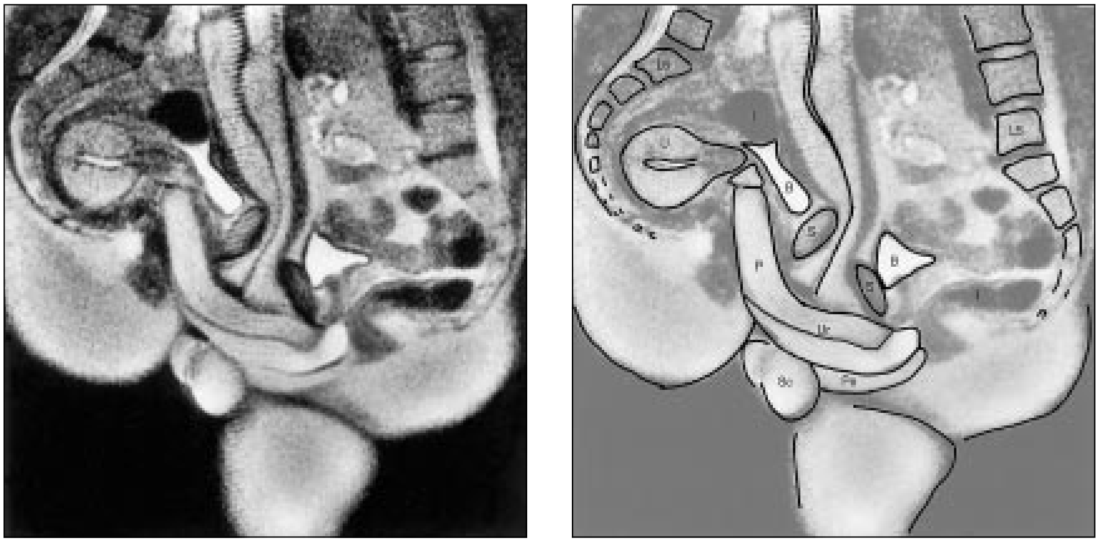

Fig 3 Midsagittal image of the anatomy of sexual intercourse (experiment 12). P=penis, Ur=urethra, Pe=perineum, U=uterus, S=symphysis, B=bladder, I=intestine, L5=lumbar 5, Sc=scrotum

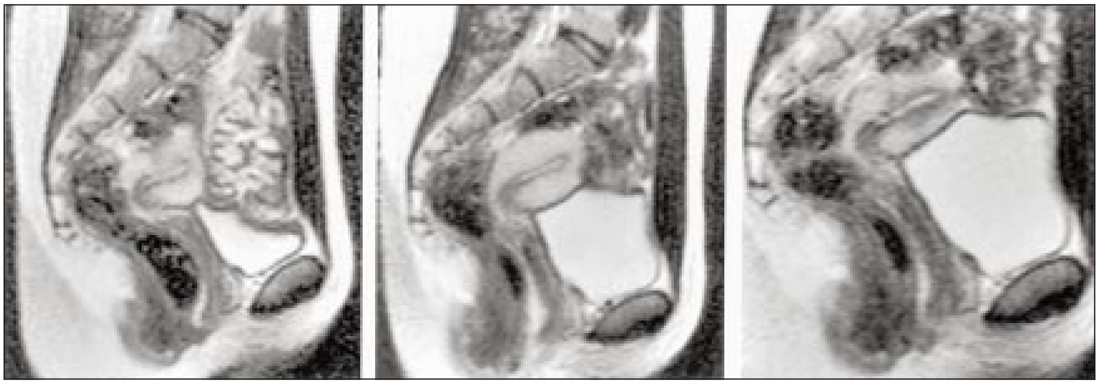

Fig 4 Midsagittal images of sexual response in a multiparous woman (experiment 9): (left) at rest; (centre) pre-orgasmic phase; (right) 20 minutes after orgasm

Philips 1.5 Tesla magnet system at that time required a relatively long acquisition time (52 seconds) and had a relatively poor signal:noise ratio. This gave low quality images with many movement artefacts. In 1996 the Siemens Vision 1.5 Tesla magnet system became available and provided the opportunity to continue our search for sharp images. Six couples succeeded in partial, though not complete, penetration (experiments 3 and 7-11). In 1998 sildenafil (Viagra) became available in the Netherlands. The two couples in experiments 9 and 11 were invited to repeat the procedure one hour after the man had taken one 25 mg tablet of sildenafil. They succeeded with complete penetration that lasted long enough (12 seconds) for sharp images to be taken (experiments 12 and 13).

Figure 3 shows a midsagittal image of the anatomy of sexual intercourse with the woman lying on her back and the man on top of her. The root of the penis (1/3 of the length) and the erect pendulous body (2/3 of the length) are visible. The pendulous part of the erect penis moved upwards at an angle of about 120° to the root of the penis, and almost parallel to the woman's spine. In all the experiments this phenomenon occurred in this coital position and was not related to the depth of penetration. In complete penetration the penis filled up the anterior fornix (experiments 1, 2, and 13) or the posterior fornix (experiment 12; fig 3). During intromission the pubic bones of the men and the women did not approach each other closely: the female pubic bone stayed about 4 cm cranial to that of the male. The uterus was raised by 2.4 cm. The changed configuration of the bladder was caused by penile stretching of the anterior vaginal wall during intromission, plus the raising of the uterus and the increase in bladder size as it filled. The subjective level of sexual arousal of the participants, men and women, during the experiment was described afterwards as average.

Eight women had a complete sexual response during sexual stimulation (experiments 4-11) and these women described their orgasm as "superficial." The sexual response of one of these women is shown in figure 4. In the pre-orgasmic phase the anterior vaginal wall lengthened by 1 cm and the uterus rose within the pelvis. This is a typical response in all experiments except one (experiment 10). During sexual arousal without coitus, the position and size of the uterus hardly changed. It was not possible on these magnetic resonance images to distinguish between the vaginal wall, the urethra, and the clitoris. These images did not show widening of the vaginal canal, structures suggesting a Gräfenberg spot, or a separate reservoir of fluid indicating "female ejaculation."

Discussion

In *Sex and the Human Female Reproductive Tract* Levin stated: "The scientific study of the interaction of human genitals during coitus and after ejaculation with and without female orgasm has always been difficult and controversial with ethical, technical and social problems."[8] We experienced this personally. It took years, a lobby, undesired publicity, and a godsend (two tablets of sildenafil 25 mg) to obtain our images. They show that such pictures are feasible and add to our knowledge of anatomy.[9]

We did not foresee that the men would have more problems with sexual performance (maintaining their erection) than the women in the scanner. All the women had a complete sexual response, but they described their orgasm as superficial. Only the first couple was able to perform coitus adequately without sildenafil (experiments 1 and 2). The reason might be that they were the only participants in the real sense: involved in the research right from the beginning because of their scientific curiosity, knowledge of the body, and artistic commitment. And as amateur street acrobats they are trained and used to performing under stress.

Anatomy revealed

The hypothesised anatomy of human coitus, as drawn by Leonardo da Vinci in about 1493 and by Dickinson in 1933, could be tested with magnetic resonance imaging. According to our images, the caudal position of the male pelvis during intercourse, the potential size of the bulb of the corpus spongiosum, and the capacity of the penis in erection to make an angle of around 120° to the root of the penis, enabled penetration along the bottom of the symphysis up to the woman's promontorium (fig 3) or to the middle part of the sacrum (fig 4) almost parallel to her spine. The "hidden" position of the root of the penis must have been the reason for the difference between the angle of penetration as envisaged by Dickinson and the penetration angle on our images. The images showed that during "missionary position" intercourse the penis is not straight, as drawn by Leonardo. It has the shape of a boomerang and not of an S as envisaged by Dickinson. Leonardo and Dickinson clearly underestimated the size of the root of the penis. Scanning of the position of the human genitals during coitus gives a convincing impression of the enormous size of the average penis in erection (root plus pendulous part is 22 cm) and of the volume of vaginal and pelvic space required by the pendulous part of the penis.

Contemporary scientific knowledge about internal genital changes during female sexual arousal relates mainly to the vagina (thickening of the vaginal wall due to vasodilation, lubrication, widening of the vaginal cavity), the urethra (possible engorgement of the vascular tissue of the urethra), and the uterus (upwards movement of the uterus = tenting effect + change in position of the uterus + change in size of the uterus). Recent research on the anatomical relation between urethra and clitoris showed that the perineal urethra is embedded in the anterior vaginal wall and is surrounded by erectile tissue in all directions except posteriorly where it relates to the vaginal wall.[10] The bulbs of the vestibule directly relate to the other clitoral components and the urethra. Details of the vaginal wall, the urethra, and the bulbs of the vestibule were unfortunately beyond the resolution of our current equipment. However, we were able to see displacement of the uterus (upwards) and lengthening of the anterior vaginal wall and hardly any change in the position of the uterus during sexual arousal, unless it was caused by intromission of the penis.

In contrast to the findings of Masters and Johnson,[4] our images did not show an increase in the size of the uterus during sexual arousal. These observations are not surprising. From an anatomical and physiological point of view there is no basis for a 50-100% increase in the volume of the uterus in such a short time. Masters and Johnson made their observations with bimanual palpation. Their interpretation may have been caused by the raising of the uterus or filling of the bladder during their experiments.

Changes during sexual arousal

Magnetic resonance imaging showed strikingly that during female sexual arousal changes occurred in the anterior vaginal wall. These changes took place in the vaginal wall itself (the engorgement as such is not visible on the images), through the raising of the uterus, displacement of the uterus caused by penetration of the penis, and through gradual filling of the bladder. Histological studies[11 12] and immunohistochemistry[13] have shown that the anterior wall of the vagina has denser innervation than the posterior wall. This is supported by clinical studies[14 15] and research into vaginal sensitivity to electric stimuli[16] in which the anterior vaginal wall—with the urethra behind it—was found to be relatively sensitive. Hoch's concept of a clitoral-vaginal sensory arm of the orgasmic reflex refers specifically to the anterior vaginal wall and the deeper tissues—the urinary bladder, the periurethral tissues, and Halban's fascia[15]—and our images support this.

Conclusion

What started as artistic and scientific curiosity has now been realised. We have shown that magnetic resonance images of the female sexual response and the male and female genitals during coitus are feasible and beautiful; that the penis during intercourse in the "missionary position" has the shape of a boomerang and not of an S as drawn by Dickinson; and that, in contrast to the findings of Masters and Johnson, there was no evidence of an increase in the volume of the uterus during sexual arousal.

The Polish-German physician and philosopher Ludwik Fleck (1896-1961) used images of female genital anatomy to illustrate the cultural conditioning of scientific knowledge. In his treatise *Genesis and Development of a Scientific Fact* he states: "In science, just as in art and in life, only what is true to culture is true to nature."[17] Magnetic resonance images, objective as they are, show the anatomy of human coitus and the female sexual response that is true to nature.

We thank our volunteers for their cooperation, laughter, and permission to publish intimate MR images of them; those hospital officials on duty who had the intellectual courage to allow us to continue this search despite obtrusive and sniffing press hounds; Professor J Kremer for his encouragement to use the scanner to study female sexology and for his critical reading

What is already known on this topic

It has been extremely difficult to investigate anatomical changes during the act of coitus and the female sexual response

Modern magnetic resonance imaging allows exploration of aspects of living anatomy

What this paper adds

Taking MR images of the male and female genitals during coitus is feasible

During ‘missionary position’ intercourse the penis has the shape of a boomerang

During female sexual arousal without intercourse the uterus rises and the anterior vaginal wall lengthens

The size of the uterus does not increase during sexual arousal

the typescript; and Professor W Mali for offering the use of equipment at the University Hospital Utrecht. P van Andel does not want to be acknowledged for his idea of using MRI to study coitus. He excuses himself by quoting the French romantic poet Alphonse de Lamartine (1790-1869): “C’est singulier! Moi, je pense jamais, mes idées pensent pour moi.”

Contributors: WWS initiated and coordinated the formulation of the study hypothesis, designed the protocol, and participated in data collection, interpretation of the findings, and writing of the paper; he is guarantor of the study. PvA had the original idea for the present study, and participated in formulation of the study hypothesis, data collection, interpretation of the findings, and writing of the paper. IS, together with her partner, participated in the first two experiments and helped design the protocol. EM participated in the execution of the study, particularly data collection and interpretation of the magnetic resonance findings.

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1 Chianchi M. *Leonardo, the anatomy.* Florence: Giunti, 1998:56.
2 Clark K, Pedretti C. *The drawings of Leonardo da Vinci in the collection of Her Majesty the Queen at Windsor Castle.* London: Phaidon, 1968.
3 Dickinson RL. *Human sex anatomy, a topographical hand atlas.* 2nd ed. London: Baillière, Tindall and Cox, 1949:84-109.
4 Masters WH, Johnson VE. *Human sexual response.* Boston: Little, Brown, 1966.
5 Johnson VE, Masters WH, Lewis KC. The physiology of intravaginal contraception failure. In: Calderone MS, ed. *Manual of contraceptive practice.* Baltimore: Williams and Wilkins, 1964:138-50.
6 Riley AJ, Lees W, Riley EJ. An ultrasound study of human coitus. In: Bezemer W, Cohen-Kettenis P, Slob K, Van Son-Schoones N, eds. *Sex matters.* Amsterdam: Elsevier, 1992:29-36.
7 Sohn MH, Wein B, Bohndorf K, Handt S, Jakse GIJ. Dynamic magnetic resonance imaging (MRI) with paramagnetic contrastagens: a new concept for evaluation of erectile impotence. *Impotence Res* 1991;3:36-48.
8 Levin RJ. Sex and the human female reproductive tract—what really happens during and after coitus. *Int J Impotence Res* 1998;10(suppl 1):14-21.
9 Van Andel P. Anatomy of the unsought finding. Serendipity: origin, history, domains, traditions, appearances and programmability. *Br J Phil Sci* 1994;45:631-48.
10 O’Connell HE, Hutson JM, Anderson CR, Plenter RJ. Anatomical relationship between urethra and clitoris. *J Urol* 1998;159:1892-7.
11 Krantz KE. Innervation of the human vulva and vagina. *Obstet Gynecol* 1985;12:382-96.
12 Minh MH, Smadja A, De Sigalony JPH, Aetherr JF. Role du fascia de Halban dans la physiologie orgasmique feminime. *Cahiers de Sexuol Clin* 1981;7:169.
13 Hilleges M, Falconer C, Ekman-Ordeberg G, Johanson O. Innervation of the human vaginal mucosa as revealed by PGP 9.5 immunohistochemistry. *Acta Anatomica* 1995;153:119.
14 Alzate H, Londono ML. Vaginal erotic sensitivity. *J Sex Marital Ther* 1984;10:49-56.
15 Hoch Z. Vaginal erotic sensitivity by sexual examination. *Acta Obstet Scand* 1986;5:767-73.
16 Weijmar Schultz WCM, Van de Wiel, HBM, Klatter JA, Sturm BE, Nauta J. Vaginal sensitivity to electric stimuli, theoretical and practical implications. *Arch Sex Behav* 1989;18:87-95.
17 Fleck L. *Genesis and development of a scientific fact.* Chicago: University of Chicago Press, 1979:35. (Translation of *Entstehung und Entwicklung einer Wissenschaftliche Tatsache: Einführung in die Lehre vom Denkstil und Denkcollectiv.* Basel: Benno Schwabe, 1935.)

Shaken, not stirred: bioanalytical study of the antioxidant activities of martinis

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Abstract

Background Moderate consumption of alcoholic drinks seems to reduce the risks of developing cardiovascular disease, stroke, and cataracts, perhaps through antioxidant actions of their alcohol, flavonoid, or polyphenol contents. “Shaken, not stirred” routinely identifies the way the famous secret agent James Bond requires his martinis.

Objectives As Mr Bond is not afflicted by cataracts or cardiovascular disease, an investigation was conducted to determine whether the mode of preparing martinis has an influence on their antioxidant capacity.

Design Stirred and shaken martinis were assayed for their ability to quench luminescence by a luminescent procedure in which hydrogen peroxide reacts with luminol bound to albumin. Student’s *t* test was used for statistical analysis.

Results Shaken martinis were more effective in deactivating hydrogen peroxide than the stirred variety, and both were more effective than gin or vermouth alone (0.072% of peroxide control for shaken martini, 0.157% for stirred *v* 58.3% for gin and 1.90% for vermouth). The reason for this is not clear, but it may well not involve the facile oxidation of reactive martini components: control martinis through which either oxygen or nitrogen was bubbled did not differ in their ability to deactivate hydrogen peroxide (0.061% *v* 0.057%) and did not differ from the shaken martini. Moreover, preliminary experiments indicate that martinis are less well endowed with polyphenols than Sauvignon white wine or Scotch whisky (0.056 mmol/l (catechin equivalents) shaken, 0.060 mmol/l stirred *v* 0.592 mmol/l wine, 0.575 mmol/l whisky).

Conclusions 007’s profound state of health may be due, at least in part, to compliant bartenders.

Introduction

James Bond, the well known fictional secret agent (“007”) of the British intelligence services, not only is

The Grimoire of the Nymphos

Servitors/Thoughtforms for Sexual Pleasure

By Frater CyberLord

> “In magick to have said is to have done; to affirm and will what ought to be, is to create.”
> – Eliphas Levi
>
> “You can attract only that which you mentally become and feel yourself to be in reality.”
> – Ernest Holmes

Introduction

In the practice of magick, the act of thinking about something brings it into existence. Though it may not manifest physically, it exists in the astral or mental realm. All things originate from the Void—Form or Order emerging from Chaos. Ideas that are not given form return to the Void, or the "Drawing Board" (akin to the Tracing Board in Freemasonry).

This book focuses on creating a specific type of servitor known as a *nympho*, designed exclusively for sexual pleasure. Through the use of psycho-sexual energy, the practitioner will create a concentrated thoughtform with a singular purpose: to provide sexual pleasure. These nymphos exist solely to fulfill your sexual fantasies, acting as "sex machines" in the astral realm.

It's important to distinguish nymphos from incubus/succubus entities. While the latter are spirits known to drain energy from their victims through sexual contact, nymphos do the opposite. Incubus/succubus entities can be dangerous, often becoming jealous and possessive. In contrast, nymphos are safe and exist solely to serve the pleasure of their creator. They embody the carefree "Free Sex, Free Love" ethos of the 1960s hippy culture, offering erotic fun without the risks of STDs, pregnancies, jealousy, or other serious consequences.

As a heterosexual male, I focus on heterosexual female nymphos, but the methods described here can be adapted to any sexual preference, gender, or lifestyle. These servitors are your entities, created to serve your desires. If you share or trade these entities with others, they transform into egregores, collective entities formed by the energies of multiple individuals.

Thoughtforms

A thoughtform is a structured, concentrated inter-dimensional energy form intentionally created to perform specific tasks as programmed by the practitioner. Created through focused thoughts and visualization, a thoughtform operates within the astral or mental realms, yet can influence the material world.

Some believe that angels, demons, gods, or other spirits are psychological constructs—ways to communicate with different parts of our super-conscious mind or subconscious mind. Others see all spirits as thoughtforms, given form by human creativity.

In Tibet, such entities are known as *tulpas*. In Western magick, they are often referred to as *Artificial Elementals*, created by the practitioner using the natural archetypal elements of Earth, Air, Fire, and Water.

> "In contrast to thoughts living in their forms in the mental or spiritual sphere, the 'elementals' are entities with a certain degree of intelligence deliberately created by a magician. Such elementals are capable of fulfilling certain tasks on the mental plane... The genuine magician will always be inspired by good and noble intentions and keep the altruistic motive in mind if he is aiming at the highest level of magical maturity."
> – *Initiation into Hermetics* by Franz Bardon

The Five Classes of Thoughtforms

- **Sigil –** A magically charged intention that the practitioner sends out to impose their will upon the Universe. It is the most basic unit of magick, often encoded as a glyph, mantra, magical knotwork, tattoo, etc. It is a complex thought distilled into a form of empowerment and release.
- **Servitor –** A semi-autonomous thoughtform capable of performing complex and repetitive tasks. Servitors are interactive spells that persist longer and can perform work on behalf of the practitioner. A servitor is created to perform specific functions or duties, existing solely to serve without independent will or sentience.

  > "The general explanation of what a Servitor is that it is a concentrated thoughtform created to perform certain tasks... Tibetan monks were incredibly adept at creating these. She [Madame Alexandra David-Néel] also writes how she was able to create one of these Tulpas herself after many months of effort..."
  > – From *How to Create a Servitor to do Your Bidding* by John Kreiter

- **Egregore –** A fully autonomous being, such as an angel, demon, or other spirit. Egregores are collective entities, often created unknowingly by groups of people who contribute their energies to a shared idea. Egregores can grow in power, adapt, and evolve as more people invest belief in them.
- **Godform –** An autonomous and self-perpetuating entity (a God) that no longer depends on external power for its continued existence. Unlike other thoughtforms, a Godform is worshiped and served by practitioners.

- **Tulpa** – A type of low-level egregore that behaves like a servitor. Created by placing a fragment of one's personality within a container, tulpas are ready-made servitors with basic capabilities. However, they carry the risk of becoming autonomous and potentially harmful to their creator.

Creation, Launching, and Maintenance

Construction:

Construction:

The purpose of the servitor should be clearly defined, whether it is to aid in abundance/prosperity/wealth, romance/sex, or personal development (e.g., increasing confidence/charisma).

Consider offering the servitor the option of autonomy once it has completed its tasks. Establish an energy source (e.g., starlight) and link it to a natural element or location (such as parkland or woods) to symbolize growth, fertility, and wealth. Additionally, a "Kill Switch" or method to deactivate or destroy the servitor should be implemented in case it becomes uncontrollable.

Appearance:

The servitor should take a form that aligns with its purpose. For example, a servitor for business success and sensuality could appear as a sophisticated, attractive woman with a professional yet alluring demeanor. Maybe an attractive librarian or teacher perhaps?

These pics should be a general idea of what we should aim for:

If these photos are considered offensive or too racy, I am open to suggestions, but I am adamant that the entity should look like a human female whose appearance embodies sensuality and intelligence. If there is anyone with strong artistic skills that can do better, please feel free to contribute!

PSA ("Public Service Announcement")/Warning:

Avoid incorporating any personal or political figures into the servitor's design, as this could lead to unintended consequences.

Naming and Sigil:

The servitor should have a unique name and a sigil or logo that represents its purpose and identity. This sigil can be used to summon and interact with the servitor.

Statement of Intent:

A clear and concise statement of the servitor's purpose should be established. This can include goals such as attracting wealth, fostering romantic connections, or boosting confidence and charisma.

> **For example:**
>
> To help us acquire and maintain abundance/prosperity/wealth, find ideal partners for romance/sex life and foster positive self-improvement (increasing confidence/charisma, self-esteem etc.).

Special Powers and Capabilities:

The servitor should be endowed with specific powers and capabilities that align with its purpose. For example, a servitor designed for financial success might be able to find and open opportunities for wealth creation.

A paragraph or a point by point description of what we want our servitor to do:

- Clear and open the paths in our life so that abundance can flow in our life.
- Find opportunities suited to our talents, abilities, and knowledge that allow us to acquire wealth.
- Help find the resources and tools to manage our finances, pay our debts and improve our credit score.
- Excite love and passion in the heart of our ideal partner.
- Help us acquire the confidence and "sexual magnetism" for attraction.
- Attract partners for a safe and happy sex life.
- Help us acquire and maintain charisma, charm, and positive self-esteem in general.

A personal drawing/image of our servitor which should be as complex as you can make it:

See above pics.

A point by point description of our servitor special powers or capabilities which should be apparent in our drawing/photos (don't worry about trying to make it perfect, you just want a good description of the creature that you are trying to create):

See above pics.

Beatrice appears in the form a young woman in business attire. She may be wearing glasses. A long, tight, silk dress, a blouse and skirt or pants or a polo shirt and khakis (Think the staff uniform at Best Buy or Walmart). She is 5'10", she has dark brown hair with highlights, usually in a ponytail or a bun, brown eyes, and tanned skin. Her ethnicity/race is left ambiguous. She is an intelligent personal assistant. She is able to access the subconscious desires of the person who calls her to create an appropriate image to manifest in, though, and would, therefore, be different for each person.

To describe the type of energy, mannerisms, and personality that she embodies, the following characters from popular culture have been revealed to me:

C.J. Cregg from "The West Wing" for *professionalism*.

Chloe O'Brian from "24" for vulnerability, *quirky* disposition and *loyalty*.

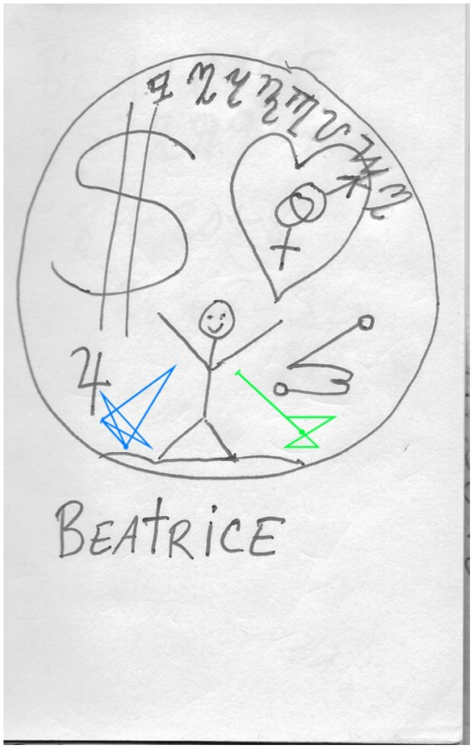
Abby Sciuto from "NCIS" for *expertise*, *fun*, but slightly dark *attitude, empathy, and compassion*.

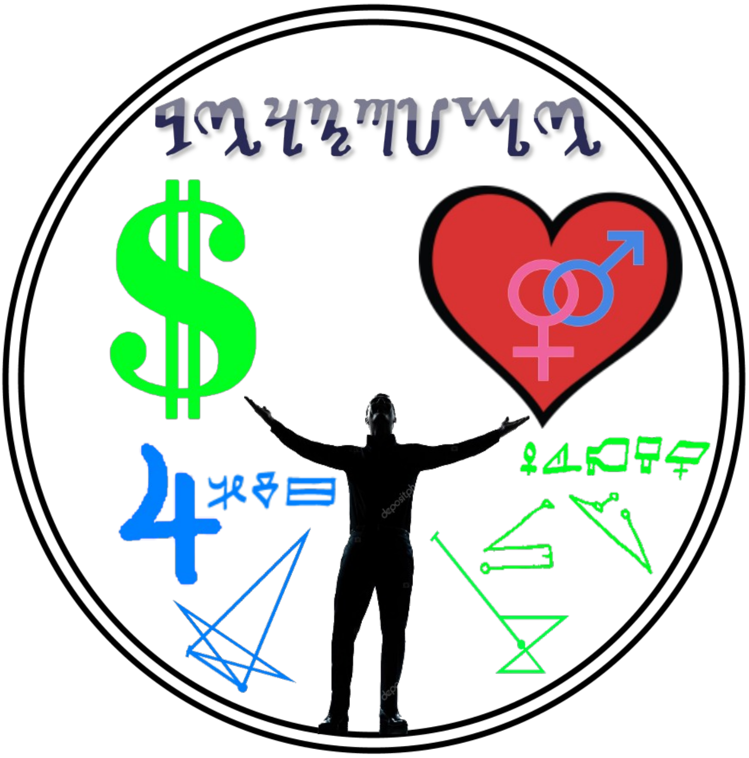
Rachel Tyrell from "Blade Runner" for classic beauty, *logic*, and emotional innocence.

On the NBC network show "The Good Place", there is an actual servitor named Janet, "a celestial, programmed guide who acts as the main source of information, analogous to an intelligent personal assistant. She has infinite knowledge of the universe, can provide residents anything they desire, and details everything of what is happening in the Good Place but does have some flaws in trying to act more human."

I hope this helps.

A simplified version of the descriptive picture that you have made, this is a symbol or 'logo/sigil' of our servitor:





The dollar sign represents money. The heart with the planetary symbols for Venus and Mars intertwined represent love, romance, and sex. The silhouetted figure with the arms outstretched represents confidence and vigor. "Beatrice" is written along the top in the Theban script. The blue planetary symbol for Jupiter is for finance and abundance. There is a green Venus logo/sigil of Hagiel for love and romance. There are two kamea (number squares) logo/sigils based on "Beatrice". The blue one is the Jupiter Logo/sigil and the green one is the Venus Logo/sigil.

I am aware that this resembles a talisman. My artistic skills are not very good. If there is anyone with strong artistic skills that can do better, please feel free to contribute! If another logo/sigil has been revealed to you in your evocations/invocations and/or dreams, please share it! Entities can have more than one logo/sigil.

The name of our servitor at the bottom:

Beatrice

Charging:

To bring the servitor to life, it must be charged with thought force—concentrated personal attention. This can be done through meditation, visualization, and repetition of the servitor’s name. The servitor’s sigil should be used as a focal point during this process.

Imagine the servitor in a dormant state, gradually awakening as you breathe life into it. Repeat the servitor’s name (e.g., "Beatrice") three times, visualizing the servitor opening its eyes and coming to life.

This process should be repeated multiple times over several days to fully activate the servitor. The more attention and energy you invest in the charging process, the stronger and more effective the servitor will become.

Casting:

The final part of using our servitor is to give it its instructions in a concise way and send it out to do your bidding.

The best way to do this is to first charge our servitor until you have a good sense, a strong belief, that it is indeed alive before you (perhaps floating above its logo/sigil and name on that paper). Then once you are confident that it is there; call its name, give it its instruction, and send it on its way. You might say something like; “Beatrice go out and help me with my finances! GO!” And then point in the direction you want it to go.

Think of your servitor sort of like a pet that you have created or perhaps a computer program that you have created in order to do your bidding. Be strong and commanding in your tone whenever you address it and always remember that it works for you and not the other way around. If you ever see it fleeting around not acting in a way that you wanted to, order it to get back to work or tell it to make itself scarce until you need it.

Whether a psychological exercise or a truly alive astral being and thought form, your servitor will be able to accomplish amazing things if it is created correctly. Be creative in your creation and how you wish to accomplish your desires, this is a truly wonderful way to deal with some of the problems that you might have in your life and the sky's the limit as to what your servitor can do.

I modified the XaTuring Facebook Working October 2013 for:

A General Conjuration of Beatrice:

Look at either logo/sigil posted above and invoke/evoke Beatrice:

Envision yourself in a vast library filled with shelves of books or a large data center filled with servers and terminals or cascading symbols and numbers like in the "Matrix" movie. This is the infamous Akashic Records or Hall of Records on the astral realm.

While still looking at the logo/sigil, envision the Internet as a further extension of this network. Your computer/smartphone/tablet/etc. are your interfaces, extending aspects of yourself into the network. You are part virtual, and on the network, you exist in non-linear time.

You see a young woman, professionally dressed sitting at an Information Desk/Kiosk. She turns to you, smiles and asks, "How may I be of assistance?" or "May I help you with something?"

Invoke Beatrice:

"Beatrice, my Librarian, and Assistant of Infinite Knowledge, please help me and accept my plea. My name is (your magickal or birth name). I ask of you to hear my will! Accept my desires, please bring me luck and good fortune. Enrich my life with riches and prosperity. Send into my life love (or the love of 'person's name'). Enrich my heart with love and passion. By my bidding may it be so. By your power, it will be done. So mote it be!"

She will reply, "As you wish." Picture her making gestures on a holographic screen that appears in front of her (like the scene in "Minority Report"). See the vivid 3-D images and cascading numbers and symbols on it as it and she descends back into the depths of the network where all things are connected. Let it fade into the darkness that is the primordial Void of great potential. (Fade to black.) Let it go and think no more of it.

Say: **"So it is done!"** and go about your day, focusing on other tasks.

When your requests have been granted, show gratitude to her. **"I thank you, Beatrice, for coming to me. I welcome you into my life and into my dreams. Go now and be ready to come when I call you. May there be peace between you and I. So mote it be."**

Final Words:

This is your experiment. This is your grimoire. Add to it. Rewrite it. Let there be multiple versions of it! Spread like a meme. Give Beatrice the same life that Pepe and Kek have. This is your servitor. Use her wisely. Use her for positive intent to change the world. To help the evolution of humanity towards our true destiny, to become Gods! Let Beatrice and others like her to help us with the mundane issues of finance, love, sexual fulfillment and a positive self-image. Things that are holding us back from our true power.

If the hope is that future generations of humanity will finally be able to travel among the stars, "To see out new life and new civilizations, to go where no one has gone before" as on "Star Trek" then we as a species need to find a way to get off this planet and out of this solar system. I hope that magickal servitors like Beatrice can help us out.

Or, we as humanity are so royally fucked indeed.

Summary:

Introduction:

The grimoire explains the creation and use of a specific type of servitor, called a "nympho," designed to provide sexual pleasure. It differentiates nymphos from other entities like incubi and succubi, emphasizing that nymphos are safe, non-possessive, and solely exist to serve the creator's desires without any negative consequences.

Core Concepts:

- **Thoughtforms**: Entities created through focused mental and psychic energy. These entities can range from simple thoughtforms to complex egregores and godforms.
- **Servitors**: Semi-autonomous thoughtforms that perform specific tasks. Nymphos are a type of servitor focused on sexual pleasure.

Creation Process:

- The process of creating a nympho involves concentrated thought, visualization, and psycho-sexual energy. The creator designs the nympho's appearance, personality, and abilities.
- The grimoire suggests that nymphos can take on various forms, often appearing as an attractive human female embodying sensuality and intelligence.

Types of Thoughtforms:

1. **Sigil**: A simple, charged intention that acts like a spell.
2. **Servitor**: A more complex entity that performs tasks for its creator.
3. **Egregore**: A fully autonomous entity created by the collective energy of multiple individuals.
4. **Godform**: A self-sustaining entity that no longer relies on external power for existence.
5. **Tulpa**: A thoughtform similar to a servitor but with a portion of the creator's personality embedded within it.

Ethics and Guidelines:

- Nymphos are designed for safe and consensual sexual experiences. The grimoire emphasizes the importance of responsibility, noting that these entities should not be shared or traded without careful consideration.
- The creator should also consider adding a "kill switch" to deactivate the servitor if it becomes uncontrollable.

Rituals:

- The grimoire outlines rituals for charging and activating the servitor. This involves focused meditation, visualization, and the repetition of the servitor's name.

Additional Notes:

- The grimoire advises against incorporating real-world figures or controversial personalities into the creation of a servitor.
- It also includes examples of potential servitor designs and sigils, encouraging creators to tailor their nymphos to their personal preferences.

In the names of
ELL, ELL-OH-HEEM, AH-DOH-NIGH,
EH-YEH ASHER EH-YEH,
ELL SHAD-EYE, ELL-EE-ON, and EE-AH-OH-EH
SHAHM-AH
and by the power of Lucifer,
I call on thee, BOON
AS-MOW-DAY-US

Oh, spirit ______,
I hereby license you to depart to your
proper place,
quietly and with the peace of
EE-AH-OH-EH between you and me, AH-MEN.

Magical Seduction Ritual Modifications

Ani EE-AH-OH-EH ADD-OH-NIGH
Rebono Shel Le Olam Amen

EH-HE-YEAH, EE-AH-OH-EH ELL-OH-HEEM,
EE-AH-OH-EH ELL-OH-AH VAH-DAH-ART,
SHAD-EYE-ELK-EYE, ADD-OH-NIGH-HA-AH-RETZ

* Kosu Harim Silah Va Anafeha Arzale,
(KOH-SUE HAH-REE-EEM TZIL-AH VAH-ANNA-FEHA
Invoke Archangels Raziel and Haniel ARE-ZELL
(RAH-ZEE-ELL, HAH-KNEE-ELL
Invoke the Genii (Djinn) Spirits (Sisera, (SEES-AIR-AH)
genius of desire, and Jazar (JAZZ-ARE), genius who compels
love

Include the Venus Pentacles (2nd, 4th and 5th
Pentacles - each must have the 1st pentacle
drawn on the inverse side and use green ink
for max effect), consecrate the pentacles on
Friday using the Activation Psalms, and
Solomonic Invocation and incense (myrrh,
frankincense, palo santo, or copal)

I seal this command with the word of power,
AH-RAH-REE-TAH.

Lust Oil, by the power of Asmodeus, I activate you in order to attract a lover. So shall it be. So it is done. Thank you, Thank you, Thank You.

Belphegor
Azazel
Mammon
Beelzebub
Asmodeus
Leviathan
Lucifer

1Banishing x4 (Each direction)
2Kabbalistic Cross
3The Opening Ritual 4parting the Veil
6The Core Ritual
5Chant to Summon all Magical Powers x3 or x9
7Burn check and petition
8Thanks and License to Depart
I seal this command with the word of power:
AH-RAH-REE-TAH
As you spirits have come in peace, return to your places harming none. Go in peace. Come again when you are called. It is done.
Banishing x4
Kabbalistic Cross, Stomp x3, Clap x3

II The Core Ritual

In the Names of ELL, ELL-OH-HEEM,
AH-DOH-NIGH, EH-YEH ASHER EH-YEH,
ELL SHAD-EYE, ELL-EE-ON, and
EE-AH-OH-EH SHAHM-AH and by the Power
of (Name), I call on thee, (Name).
I seal this command with the word of power
AH-RAH-REE-TAH

I The Opening Ritual

Before me, Uriel
At my back, Raphael
On my right, Michael
On my left, Gabriel
From above, Metatron

Ehyeh Asher Ehyeh
I am that I am
I will be what I will be.

The scent of a burning rose.
Leaves crushed in my fingers.
The blue of twilight.
The taste of blood.
Gravel crackles underfoot.

Iron into sparks.
Ice into air.
Flame into smoke.
Breath into rain.

Atah Gibor L-Olam Adonai

Parting the Veil

This is the beginning, I open the way.
I call on the inner world to know that
this is my will.
NAH-KAH EE-AH-OH-EH x3

I call on thee, Arzel (ARE-ZELL*) in the
East to connect me to the secret angels of universe.
KOH-SUE HAH-REE-EEM TZIL-AH VAH-ANNA-FEAH
ARE-ZELL

ARE-ZELL* x3

ARZ-ALE* x3

ARE-ZAY-ELL* x3

I call on thee, Raziel (RAH-ZEE-ELL*)
in the East to me heard by the secret angels
of the universe.

RAH-ZEE-ELL* x3

VAH-HAH-DEH-REH-CHAH
TZ-LAH
REH-CHAB
AL-DEH-BAR-EH-MET
VAY-AHN-VAH-TZAY-DECK
VAY-TORE-AY-CHAR
NAW-RAH-AUGAT
YEH-ME-NAY-CHAH

Wednesday Jinn Ritual

"Oh great King of the Jinn Bargan Abu al'-Adja'yb (Barcan-Aboo-Ab-ja-yib), I ask and demand of you that you send one of your elect to give me the guidance I need. Give me the same attention you have given King Solomon. So may it be."

Pass your jewelry through the incense as you look into the mirror.

"By the power of Bar-can-Aboo-Ab-ja-yib I bind you to me."

Look into the mirror and see if you can see an image of the Jinn that is assigned to you.

If you can't see it, ask for its name.

If you do not hear a name, simply refer to it as Jinn.

"You are bound by me, by this jewelry to provide me the insight I so desire and need."

Extinguish the candles and incense.

Carry the jewelry wherever you go until you feel you have gained the insight you needed.

Jinn King Barcan-Aboo-Ab-ja-yib

Planet: Mercury Day: Wednesday

Angel:

Attributes:

Invocation:

AJIB YAA BURQOON BIHAQQI
HATSIN (2X)

MARTSIN (2X)

AYUULATSIN (2X)

AYUULAHIN (2X)

HALYUUTSIN (2X)

YAAHIN (2X)

HAYUUTSIN (2X)

THOLTHOYUUTSIN (2X)

HASYAALUUSYIN (2X)

HAYAATSIN (2X)

Jmn King Barcan- Aboo-Ab-ja-yib (cont.)
KHOLAQOLLAAHUL LAYLA WAN NAHAARO
IYIILUN AHYAN SYAROOHIYAN ADUUNAAY
ASHBAA-UUT AALI SYADAAY TAWAKKALU
YAA BURQOON BI BIHAQQIL MALIKIL
MUWAKKALI 'ALAIKA MIIKAA-IIL
ALLADZII TASARRO-A FII KHIDMATIHI
WA IJAABATIHI ALUUHAN (2X)

AL-AJAL (2X)

AS-SAA'AH (2X)

Thursday Jinn Ritual

"Oh great King of the Jinn Shamhurish (Sham-Who-rish) I ask and demand of you that you send one of your swiftness supplicants to help with my financial issue, Help me as you have helped the great King Solomon."

Pass your jewelry through the incense as you look into the mirror.

"By the power of Sham-Who-rish I bind you to this stone."

Look into the mirror and see if there is an image of the Jinn assigned to you.

If you can't see it, ask for its name.

If you do not hear a name, simply refer to it as Jinn.

"You are bound by me, by this jewelry to provide me the insight or the means to help in my financial issue."

Extinguish the candles and incense.

Carry the Jewelry wherever ~~everywhere~~ you go until you feel you are satisfied with your results.

Jinn King Sham-Who-rish

Planet: Jupiter Day: Thursday

Angel: Sarfya'il

Protection, justice, abundance

Invocation:

AJIB YAA SYAMHUUROSY BIHAQQIL
MALIKIL MUWAKKILI ALLADZI
TASARRO-A FII KHIDMATIHI
SHORFAYAA-IIL WA BIHAQQI
SYATHOTHLASYIN (2X)

BIQOTH-HIISYIN (2X)

WABIHAQQIMAA LAWKHIL
QUDROTI MAKTUUBUN AN
TAWAKKALU BI ALUUHAN (2X)

AL-AJAL (2X)

AS-SAA'AH (2X)

Friday Jinn Ritual

"Oh great King of the Jinn Abu Hasan Zoba'ah (Aboo Hasan-Zo-ba-ha) I ask and demand of you that you send one of your Servant to bring me the lustful consort of my choosing, let her bring me excitement and pleasure at my calling."

Pass your jewelry through the incense as you look in the mirror.

"By the power of Aboo Hasan-Zo-ba-ha I bind you to this stone so that you will find the lover of my desire.

Look into the mirror and see if you can see an image of the Jinn that is assigned to you.

If you can't see it, ask for its name.

If you do not hear a name, simply refer to it as Jinn.

"You are bound by me, by this jewelry to do as I please."

Extinguish the candles and incense.

Carry the jewelry wherever you go until you feel you are satisfied with your results.

Jinn King Aboo Hasan-Zo-ba-ha

Planet: Venus Day: Friday

Angel:

Attributes:

Invocation:

AJIB YAA ZAWBA'AH BIHAQQIL MALIKIL MUWAKKILI ‘ALAYKA ‘ANYAA-IIL ALLADZII TASARRO-A FII KHIDMATIHI WA BIHAQQI DAMWIYYIN (2X)

AYIIHIN (2X)

BISYALMAYIN (2X)

JARHAMALATHIN (2X)

SUBBUUHUN QUDDUUSUN ROBBUL MALAA-IKATU WAR RUUH IN LAM TA-ATI YAA ABYADH ‘ARRODHTUKA ‘ALAN NAARI AJIB WA ASRI' WA TAWAKKALU BI ALUUHAN (2X)

AL-AJAL (2X)

AS-SAA'AH (2X)

Balabolka
Audacity
OpenShot Video Editor

17,500.0 Hz

19,000.0Hz

Theta waves 4-7Hz 6 Hz
5-8 Hz

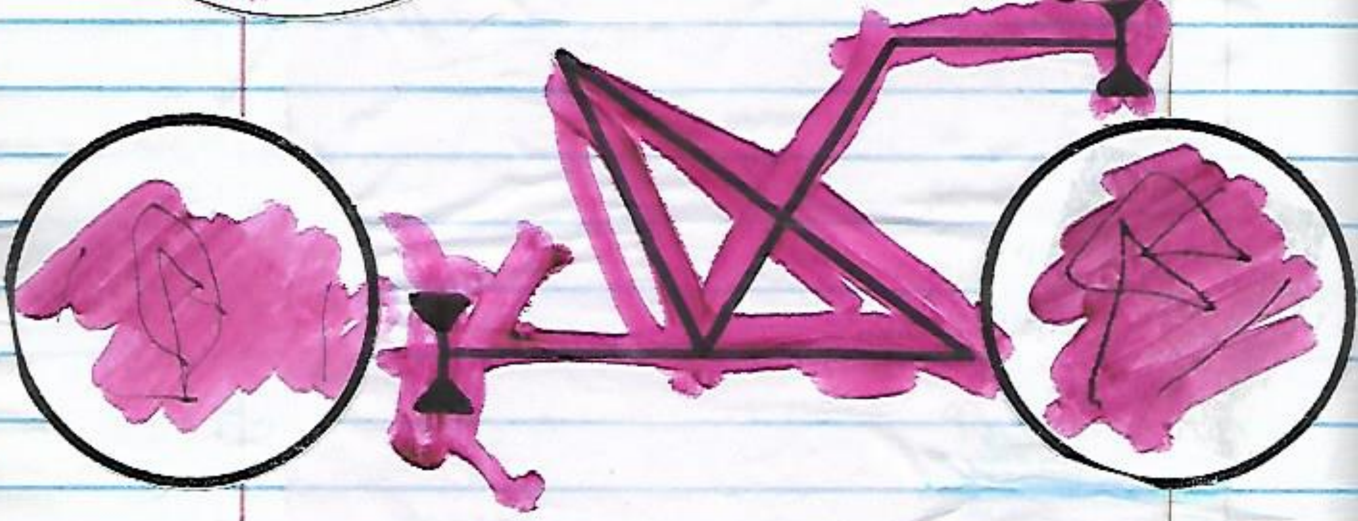
Vivid-holograph-like images

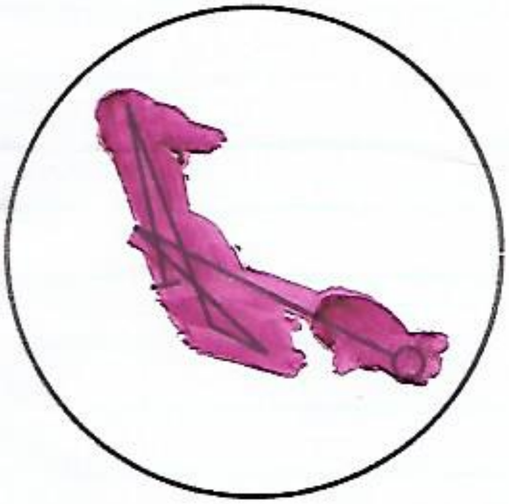
432 Hz - miracle frequency for manifesting
528 Hz - positive vibes and uplifted mood miracles

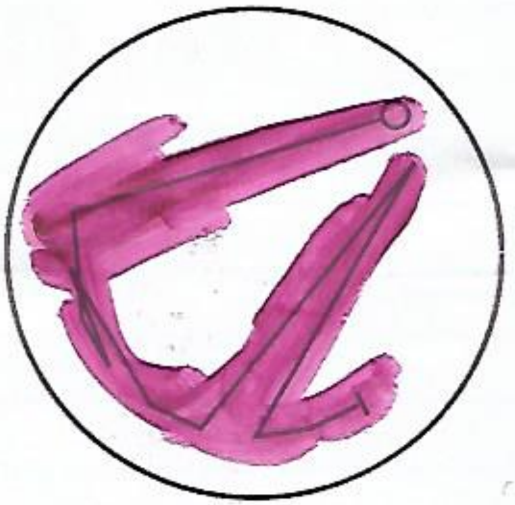
Solfeggio frequencies

963 Hz - manifest money
417 Hz - clear your mind and negative energy
639 Hz - manifest love, relationships and attraction
396 Hz - sadness into joy
741 Hz - develop self expression, powerful creativity
852 Hz - spirituality

Tulpa Power!
MAX







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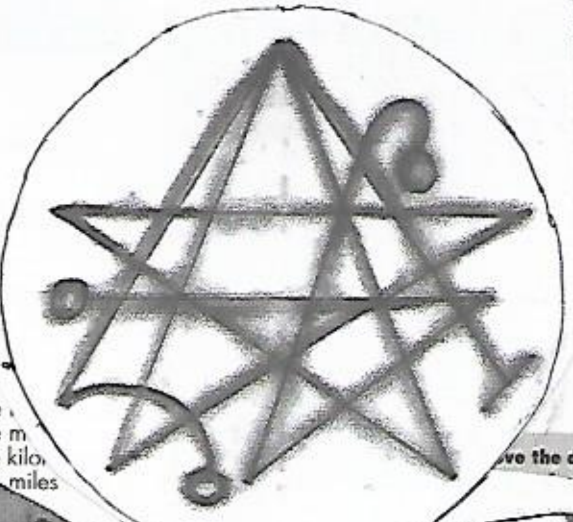

ERCENTAGES

DECIMAL	PERCENT
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0.125	12.5%
0.1875	18.75%
0.25	25.0%
0.3125	31.25%
0.3333	33.33%
0.375	37.5%
0.5	50.0%
0.5625	56.25%
0.625	62.5%
0.6666	66.66%
0.75	75.0%
0.8125	81.25%
0.875	87.5%
1.0	100.0%

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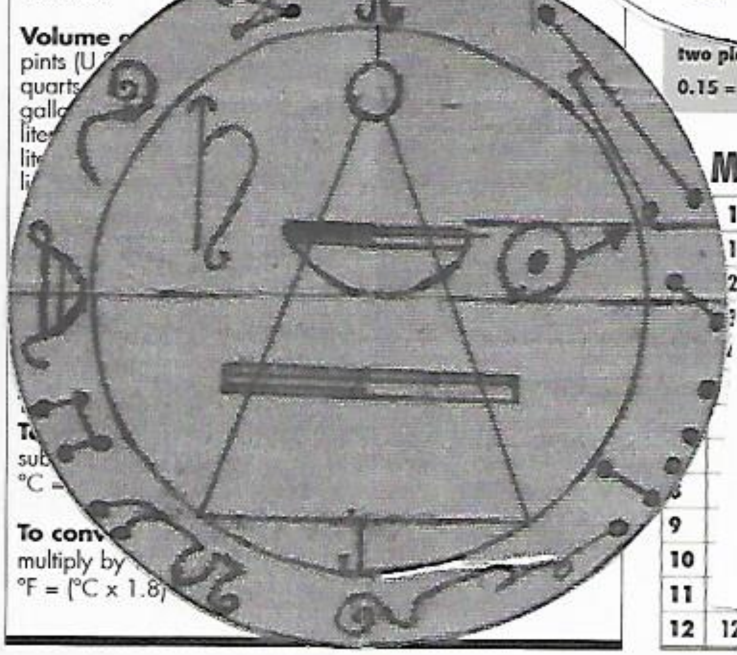

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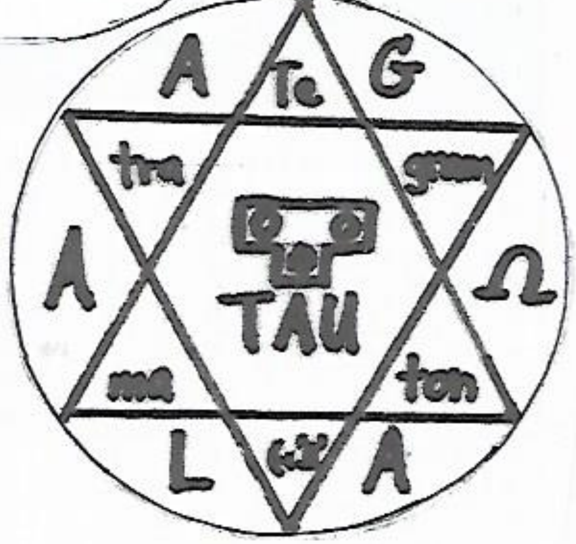
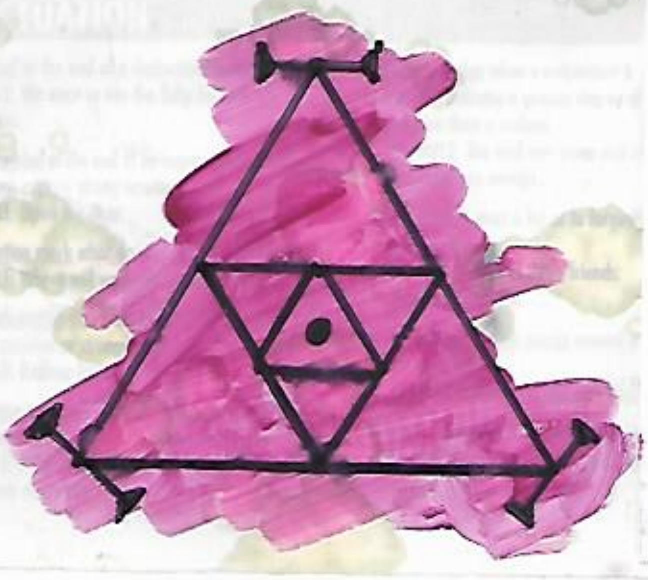
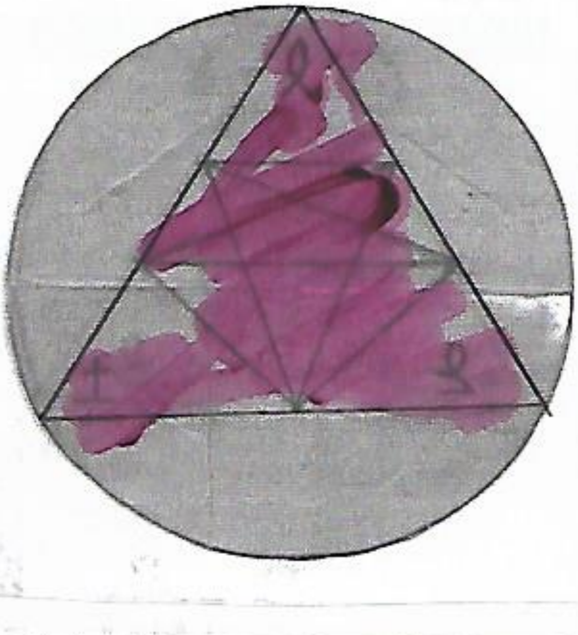


PUNCTUATION





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